



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

SSD 2011

March 22-25, 2011

Sousse, Tunisia



Eighth International Multi-Conference on Systems, Signals and Devices SSD'11 March 22-25, 2011 Sousse – Tunisia

Organized by:

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

Philadelphia University (Jordan)

University of Chemnitz, (Germany)

Supported by:

Instrumentation and Measurement Society, IEEE IMS

Instrumentation and Measurement Society, German Chapter

Systems, Man & Cybernetics Society, Tunisian Chapter

Robotic and Automation Society, Tunisian Chapter

Signal Processing Society, Tunisian Chapter

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IEEE Computer Society – Jordan

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Tunisian Scientific Society (TSS) (Tunisia)

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

Arab Science and Technology Foundation (ASTF) (Egypt)

The University of Babylon (Iraq)

SSD'11 General Chairs:

Prof. Nabil Derbel (Tunisia)
National School of Engineering of Sfax, University of Sfax

Prof. Olfa Kanoun (Germany)
Chemnitz University of Technology

SSD'11 Honorary Chair:

Prof. Hans-Rolf Tränkler (Germany)
Bundeswehr University Munich,

Conference on Systems Analysis and Automatic Control Chair:

Prof. Faouzi M'sahli (Tunisia)

Conference on Power Electrical Systems Chair:

Prof. Ilhem Slama-Belkhodja (Tunisia)

Conference on Communication and Signal Processing Chair:

Dr. Faouzi Derbel (Germany)

Conference on Sensors, Circuits and Instrumentation Systems Chair:

Prof. Lotfi Kamoun (Tunisia)

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Luis Martinez Salamero (Spain)

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Mohamed M'Saad (France)

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, SSD'10 held in Amman-Jordan, the eighth International Multi-Conference on Systems, Signals and Devices - SSD'11 to be held at Sousse-Tunisia, 22nd to the 25th of March 2011. The conference program consists of 3 plenary sessions, 12 Keynote Lectures and 47 oral sessions. SSD'11 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'11 secretariat has received 385 submissions from 31 countries: Algeria, Austria, Canada, Egypt, Estonia, Finland, France, Germany, Iran, Iraq, Italy, Japan, Jordan, Kuwait, Libya, Malaysia, Mexico, Morocco, Netherland, Oman, Portugal, Qatar, Romania, Saudi Arabia, Spain, Taiwan, Tunisia, Turkmenistan, 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 300 scientists from more than 30 countries. Only 259 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'11 financially.

Professors Nabil Derbel and Olfa Kanoun

Sousse, Tunisia

March, 2011

General Informations

Date and Location

On the eastern coast of Tunisia, one hour and a half from the capital Tunis lies Sousse, “the pearl of the Sahel” . The mildness of its climate, its calm and beautiful coast and the hospitality of its people have long captivated those who came to conquer. Phoenicians, Romans, Byzantines and Arabs settled in this lovely ”fertile city” each leaving their imprint and heritage. No wonder modern day visitors from all over the world find themselves at home and return again and again. The resort area of Sousse is perfectly integrated into the city and the visitor welcomed to participate in its exuberance. Proud of its heritage, museums and monuments are accessible and opened with pleasure to its guests and the Medina with its tiny colorful shops overflowing with silver jewelry, pure wool blankets, copper and carpets bustle with activity under the towering walls of the ribat.

Access

Sousse is about 140 km south of Tunis, 120 km north of Sfax, 60 km east of Kairouan and 20 km from Monastir airport. Railway stations are available.

For more information about Tunisia see:

- ➡ <http://www.tunisiaonline.com/>
- ➡ <http://www.tourismtunisia.com/>
- ➡ <http://www.madeinsousse.com/en>

For more information about Sousse see:

- ➡ <http://www.touristicguide.com/>



Transfer to Sousse:

✈️ **Arrival to Tunis Carthage Airport:**

From the airport to the Railway Station: by taxi (about 10 Dinars) or by Aero-Bus.

From the airport to the Hotel (Sousse): by taxi (about 75 Dinars)

Train from Tunis to Sousse or Kalâa Sghira less than two hours (between 10 and 15 Dinars)

From Sousse or Kalâa Sghira Railway Station to the hotel : by Taxi or Tourist Train (about 10 Dinars).

✈️ **Arrival to Monastir Habib Bourguiba Airport:**

By Taxi (about 20 Dinars) or by the Railway (Metro) to Sousse.

Then by Taxi or Tourist Train (about 10 Dinars).

Hours of travel train from Tunis to Sousse or Kalâa Sghira

Departure	Arrival
06:00	07:55
07:05	08:35
08:00	09:37
08:40	10:15

Departure	Arrival
09:40	11:31
11:20	12:45
12:05	13:39
12:35	14:22

Departure	Arrival
13:05	14:49
13:35	15:06
16:30	18:07
17:35	19:10

Departure	Arrival
18:00	19:45
18:45	20:48
20:50	22:43
22:20	00:12

The Host Country Tunisia

Official Language:

The official language in Tunisia is Arabic. The second language is French and is spoken by almost all people. The third language, which is taught at school until baccalaureate is English. Especially in tourism towns like Sousse, many people speak other languages, like German, Italian and Spanish.

Currency Exchange:

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

1 TND \simeq 0.518 €	1 € \simeq 1.92 TND
1 TND \simeq 0.70 US\$	1 US\$ \simeq 1.43 TND

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

Up to 30 % of the exchanged amount could be changed back against Receipt at leaving. By an export of more than a value of 500 TND, a currency entry statement is necessary.

Bank opening times:

Monday-Thursday:	8:00-11:00 and 13:30-15:15
Friday:	8:00-11:00

Furthermore, in most hotels, there are possibilities to change little amounts of money.

Conference Web-Site

► <http://www.ssd-conf.org>

Conference Registration Desk

The Conference registration desk will be indicated at the Elmoradi Club Hotel, and will be open on Sunday, March 21, from 3:00pm to 7:00pm.

Payment Method and Registration Fees

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

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 March 1st 2011	Late Registration
Full Fare for one paper	420 €	470 €
Student	290 €	340 €
Industrial	590 €	640 €
Additional paper	150 €	150 €
Charge per extra page	50 €	50 €

Students must show a valid proof of their student status.

Additional Proceedings

An additional copy of the conference summary book costs 30 TND

An additional copy of the conference CD-ROM costs 30 TND

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.

SSD'11 : Multi-Conference Program

	08 h 20 – 09 h 10	09 h 10 – 10 h 00	10 h 00 – 10 h 30	10 h 30 – 11 h 30	11 h 30 – 12 h 20	12 h 20 – 14 h 20	14 h 20 – 16 h 10	16 h 10 – 16 h 40	16h 40 – 18 h 20	18 h 20 – 19 h 00	
Monday March, 21							Registration				
Tuesday March, 22	Registration	Official Opening	Coffee Break	Plenary Session 1	Keynote Lecture L1	Lunch	Oral Session SAC 1 & SAC 2 PES 1 & PES 2 CSP 1 & CSP 2 SCI 1	Coffee Break	Oral Session SAC 3 & SAC 4 PES 3 & PES 4 CSP 3 & CSP 4 SCI 2	SSD Meeting	
Wednesday March, 23	Plenary Session 2	Keynote Lecture L2	Coffee Break	Oral Sessions SAC 5 & SAC 6 PES 5 & PES 6 CSP 5 & CSP 6 SCI 3		Lunch	SSD'11, Social Program				
Thursday March, 24	Plenary Session 3	Keynote Lecture L3	Coffee Break	Oral Sessions SAC 7 & SAC 8 PES 7 & PES 8 CSP 7 & CSP 8 SCI 4		Lunch	Oral Session SAC9 & SAC10 PES9 & PES10 CSP9 SCI 5& SCI 6	Coffee Break	Oral Session SAC 11 & SAC 12 SAC 13 & PES 11 CSP 10 & CSP 11 SCI 7	Conference Dinner at 21h00	
Friday March, 25	Oral Session SAC 14 & SAC 15 PES 12 CSP 12 SCI 8		Coffee Break	Closure		Lunch	Post Conference Program				

Conference on Systems Analysis & Automatic Control

Conference chair:

Faouzi M'Sahli (Tunisia)
Monastir University, National School of Engineering of Monastir

Scientific Program committee:

Chairs:

Mondher Farza (France)
Ecole Nationale Supérieure d'Ingénieurs de Caen, France
Faïçal Mnif (Oman)
College of Engineering, Sultan Qaboos University, Muscat, Oman

Members:

Abdessamad Nait-Ali (France)	Ercan Solak (Turkey)
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Afef Abdelkrim (Tunisia)	Hugh McNamara (UK)
Afrooz Ebadat (Ireland)	Jawhar Ghommam (Tunisia)
Ahmed El Hajjaji (France)	Jean-Claude Trigeassou (France)
Ahmed Elaiw (Saudi Arabia)	José Ragot (France)
Ahmed Said Nouri (Tunisia)	Kasim Al-Aubidy (Jordan)
Akshya Swain (New Zealand)	Lassaad Koubaa (Saudi Arabia)
Alain Glumineau (France)	Lassaad Sbita (Tunisia)
Alan Colman (Austria)	Lazhar Khriji (Oman)
Alan Zinober (UK)	Lotfi Ben Amor (Saudi Arabia)
Alexandros Charalampidis (Greece)	Maamar Bettayeb (UAE)
Ali Elahidoost (USA)	Maarouf Saad (Canada)
Ali Jaafar (France)	Mansoor Alghooneh (Canada)
Alicia Arce (Spain)	Manuel A. Armada (Spain)
Amer Zerek (Lybia)	Mauro Gaggero (Italy)
Amthor Arvid (Germany)	Mohamed Boutayeb (France)
Anas Kamoun (Tunisia)	Mohamed Chaabane (Tunisia)
Andrey Tarakanov (Russia)	Mohamed Darouach (France)
Antoine Chaillet (France)	Mohamed Deriche (Saudi Arabia)
Antonio Sala Piqueras (Spain)	Mohamed Ouali (Tunisia)
Antonios Tsourdos (UK)	Mohamed Sahfiq (Oman)
Apoorva Kapadia (USA)	Mohamed Zribi (Kuwait)
Arnab Maity (India)	Mohammed M'saad (France)
Artur Arsenio (Portugal)	Mohsen Askari (Austria)
Aryan Saadat Mehr (Canada)	Moncef Gasmi (Tunisia)
Ashish Dutta (India)	Murad Abu-Khalaf (USA)
Athanasios Karlis (Greece)	Naceur Ben Hadj Braiek (Tunisia)

Bahareh Vatankhah Alamdari (Ireland)
Behrouz Ebrahimi (Ireland)
Belkacem Ould Bouamama (France)
Bernard Brogliato (France)
Bernhard Zagar (Austria)
Boutaieb Dahhou (France)
Bradley Null (USA)
Carlos Vazquez-Aguilera (Mexico)
Carmine Landi (Italy)
Chokri Rekik (Tunisia)
Clemens Guehmann (Germany)
Daniel Benevides Da Costa (Brasil)
Danilo Macciò (Italy)
David Arroyo (Spain)

Naser Tarhuni (Oman)
Nezha Maamri (France)
Pascal Bigras (Canada)
Patrick Garda (France)
Pierre Melchior (France)
Reza Adhami (USA)
Riadh Zaier (Oman)
Sreenatha Gopalarao Anavatti (Austria)
Tianjiang Hu (China)
Vedran Bilas (Hongrie)
Voicu Groza (Canada)
Yassine Koubaa (Tunisia)
Zhang Bin (China)

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'11 : SAC–Conference Program


	08 h 20 – 09 h 10	09 h 10 – 10 h 00	10 h 00 – 10 h 30	10 h 30 – 11 h 30	11 h 30 – 12 h 20	12 h 20 – 14 h 20	14 h 20 – 16 h 10	16 h 10 – 16 h 40	16h 40 – 18 h 20	18 h 20 – 19 h 00	
Monday March, 21							Registration				
Tuesday March, 22	Registration	Official Opening	Coffee Break	Plenary Session 1	Keynote Lecture SAC L1	Lunch	Oral Session SAC 1 & SAC 2	Coffee Break	Oral Session SAC 3 & SAC 4	SSD Meeting	
Wednesday March, 23	Plenary Session 2	Keynote Lecture SAC L2	Coffee Break	Oral Sessions SAC 5 & SAC 6		Lunch	SSD'11, Social Program				
Thursday March, 24	Plenary Session 3	Keynote Lecture SAC L3	Coffee Break	Oral Sessions SAC 7 & SAC 8		Lunch	Oral Session SAC9 & SAC10	Coffee Break	Oral Session SAC 11 , SAC 12 SAC 13	Conference Dinner at 21h00	
Friday March, 25	Oral Session SAC 14 & SAC 15		Coffee Break	Closure		Lunch	Post Conference Program				


Monday, 21 of March, 2011

Registration		<u>Monday, 15h00-19h00</u>
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Tuesday, 22 of March, 2011

Registration		<u>Tuesday, 8h20-9h00</u>
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Official Opening		<u>Tuesday, 9h00-10h00</u>
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Coffee Break		<u>Tuesday, 10h00-10h30</u>
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Plenary Session 1 : Chairs : H.-R. Tränkler (Germany) N. Derbel (Tunisia) 1569393147 Autonomous aerial vehicles: guidance, control, signal, and image processing platform <i>M. Al-Jarrah</i> (UAE)	<u>Tuesday, 10h30-11h30</u>
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Keynote Lecture, Session KL-SAC 1 : Chairs : B. Ould Bouamama (France) M. Chtourou (Tunisia) 1569393153 Ripple-free control of non-uniformly sampled data mimo systems <i>P. Albertos</i> (Spain)	<u>Tuesday, 11h30-12h20</u>
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Lunch		<u>Tuesday, 12h20-14h20</u>
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Tuesday, 14h20-16h10

Session SAC 1 : Special Session on Nonlinear Observers 1

Chairs : M. M'Saad (France)
M. Farza (France)

- 1569354323 Fault diagnosis for dynamic power system
A. Thabet, M. Boutayeb, G. Didier, S. Chniba and M.N Abdelkrim
.....(Tunisia–France)
- 1569386907 Examples of pipeline monitoring with nonlinear observers and real-data validation

L. Torres, G. Besancon, A. Navarro, O. Begovich and D. Georges
.....(France–Mexico)
- 1569392591 Tyre effective radius and vehicle velocity estimation: a variable structure observer
solution
C. El Tannoury, F. Plestan, S. Moussaoui and N. Romani(France)
- 1569398667 H_∞ observers design for a class of continuous time nonlinear singular systems .
M. Zerrougui, L. B. Baddas and M. Darouachi..... (France)
- 1569400897 UIO-based fault detection and isolation for a class of neutral system
A. Elhsoumi and R. Elharabi..... (Tunisia)

Tuesday, 14h20-16h10

Session SAC 2 : System Identification

Chairs : M. Djemel (Tunisia)
M. N. Abdelkrim (Tunisia)

- 1569370579 A modified fuzzy c-regression model clustering algorithm for T-S fuzzy model
identification
M. Soltani, B. Aissaoui, A. Chaari, F. Ben Hmida and M. Gossa(Tunisia)
- 1569371569 Identification of GMS friction model without friction force measurement
S. Grami and H. Aissaoui(Canada–Canada)
- 1569384575 Subspace identification of Hammerstein models using support vector machines .
M. Al-Dhaifallah(Saudi Arabia)
- 1569387063 Analysis and application of two recursive parametric estimation algorithms for
an asynchronous machine
S. Kamoun and N. Damak(Tunisia)
- 1569387221 Third-order cumulants based method for continuous-time errors-in-variables sys-
tem identification by fractional models
M. Chetoui, R. Malti, M. Thomassin, M. Aoun, S. Najjar and M. N. Abdelkrim
.....(France–Tunisia)
- 1569397471 Design and Parameter Identification of a General Hammerstein Model
S. Rejeb, F. Ben Hmida, A. Chaari, M. Gossa and H. Messaoud(Tunisia)

Tuesday, 16h10-16h40

Coffee Break



Tuesday, 16h40-18h20

Session SAC 3 : Advances in Linear Control Theory

Chairs : J. C. Trigeassou (France)
P. Melchior (France)

- 1569386897 On the fractional systems'fault detection: a comparison between fractional and rational residual sensitivity
M. Aoun, A. Aribi, S. Najar and M. N. Abdelkrim (Tunisia)
- 1569387055 Fractional integration a comparative analysis of fractional integrators
J.C. Trigeassou and A. Oustaloup (France)
- 1569387783 Path tracking design by input/output Davidson-Cole transfer function
N. Yousfi, P. Melchior, C. Rekik, N. Derbel and A. Oustaloup (France–Tunisia)
- 1569393101 Multiple model reduction based control approach for non linear systems
A. Zribi, M. Chtourou and M. Djemel (Tunisia)
- 1569386501 Actuator fault tolerant control for delayed systems
N. Abdelkrim, A. Tellili and M. N. Abdelkrim (Tunisia)
- 1569386759 An ellipsoidal set-membership parameter estimation of fractional orders systems
M. Aoun, M. Amairi, Z. Lassoued, S. Najar and M. N. Abdelkrim ... (Tunisia)

Tuesday, 16h40-18h20

Session SAC 4 : System Optimization

Chairs : M. Benrejeb (Tunisia)
A. A. Al-Saif (Saudi Arabia)

- 1569372165 Monitoring of dynamic process by hybrid automata
M.F. Karoui, H. Alla and A. Chatti (Tunisia–France)
- 1569387761 Conditions on diagnosis and accommodation delays for actuator fault recoverability
R. Hamdaoui and M. N. Abdelkrim (Tunisia)
- 1569387277 New Dilated LMI Conditions for the Single Channeled Multiobjective Static State Feedback Controller Synthesis in Continuous-Time Systems
K. Dabboussi and J. Zrida (Tunisia)
- 1569372239 Hierarchical fuzzy signatures approach for a piloted quality management system
H. Ben Mahmoud Dammak, R. Ketata, T. Ben Romdhane and S. Ben Ahmed
..... (Tunisia)
- 1569386783 Fault parametric detection using flatness property of systems
A. Belgacem, H. Jerbi and M. N. Abdelkrim (Tunisia)
- 1569387349 A Nonlinear MIMO System Identification based on Improved Multi-Kernel Least Squares Support Vector Machine (Improved Multi-Kernel LS-SVM)
M. Tarhouni, K. Laabidi, S. Zidi and M. Lahmari-Ksouri ... (Tunisia–France)

Tuesday, 18h20-19h00

SSD Meeting



Wednesday, 23 of March, 2011

Wednesday, 8h20-9h10

Plenary Session 2 :

Chairs : I. Belkhodja (Tunisia)
A. Masmoudi (Tunisia)

1569393159 Renewable energy, global warming, and the impact of power electronics
A. F. Zobaa (UK)

Wednesday, 9h10-10h00

Keynote Lecture, Session KL-SAC 2 :

Chairs : P. Albertos (Spain)
M. Al-Jarrah (UAE)

1569393141 Modular self-reconfigurable robots
M. Yim (USA)

Wednesday, 10h00-10h30

Coffee Break



Wednesday, 10h30-12h20

Session SAC 5 : Nonlinear Control

Chairs : G. Poisson (France)
J. Ghommam (Tunisia)

1569387107 Finite Time Stabilization of Non Linear Systems by State Feedback
C. B. Njima, W. B. Mabrouk, G. Garcia and H. Messaoud ... (Tunisia–France)

1569372197 A high order sliding mode-multimodel control of nonlinear systems simulation on a submarine mobile
A. Rhif, Z. Kardous and N. Benhadj Braiek (Tunisia)

1569387139 Fuzzy predictive control of nonlinear systems
W. Dhouib, M. Djemel and M. Chtourou (Tunisia)

1569383949 Adaptive robust control schemes of uncertain time-delay systems and its applications to water pollution control systems
H. Wu (Japan)

1569375025 Reduction of torque ripple in DTC for induction motor using input-output feedback linearization
S. Belkacem, F. Naceri and R. Abdessemed (Algeria)

1569387831 Three axis attitude control using sliding mode for LEO microsatellite
A. Bellar, B. Seba, S. M. Arezki and R. Roubache (Algeria)

Wednesday, 10h30-12h20

Session SAC 6 : Optimal and Robust Control

Chairs : B. Bouamama (France)
N. Derbel (Tunisia)

- 1569387235 Representation and control of time delay system: multimodel approach
S. Bedoui, M. Ltaief, K. Abderrahim and R. Ben Abdennour (Tunisia)
- 1569372243 Optimal control of an holonomic system: feedforward design and LQR control
for a “pick and place” system
A. Salah and A. Chatti (Tunisia)
- 1569397251 Recursive least-squares estimation for the joint input-state estimation of linear
discrete time systems with unknown input
T. Bessaoudi, K. Khémiri, F. Ben Hmida and M. Gossa (Tunisia)
- 1569387407 Stable adaptive control of a multivariable nonlinear process
S. Choueikh, S. H. Said and F. M’Sahli (Tunisia)
- 1569397029 Particle filter approach to fault detection and isolation in nonlinear systems ...
F. Souibgui, F. Ben Hmida and A. Chaari (Tunisia)
- 1569387169 A time moments approach to the design of robust fractional PID controllers ...
M. Tenoutit, N. Maamri and J. C. Trigeassou (France)

Wednesday, 12h20-14h20



Lunch

Wednesday, 14h30-19h00



SSD Conference Tour

Thursday, 24 of March, 2011

Thursday, 8h20-9h10

Plenary Session 3 :

Chairs : O. Kanoun (Germany)
K. M. Al-Aubidy (Jordan)

- 1569393145 Bond graphs: an integrating tool for design of mechatronic systems
B. Ould Bouamama (France)

Thursday, 9h10-10h00

Keynote Lecture, Session KL-SAC 3 :

Chairs : G. Poisson (Jordan)
A. A. Al-Saif (Saudi Arabia)

- 1569390959 Estimation and model-free approaches for automotive control
B. d'Andréa-Novel (France)

Thursday, 10h00-10h30

Coffee Break



Thursday, 10h30-12h20

Session SAC 7 : Robust Control

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

- 1569387331 Multimodel H_∞ loop shaping control of a DC motor under variable loads
A. Tahar and M. N. Abdelkrim (Tunisia)
- 1569387439 On Robust H_∞ Stability Analysis of Uncertain Neutral Systems with Time Varying Delays: A Novel Augmented Lyapunov Functional Approach
I. Amri, D. Soudani and M. Benrejeb (Tunisia)
- 1569386977 Reduced order H_∞ stable controllers
A. A. Al-Saif (Saudi Arabia)
- 1569387335 Stability and stabilization of constrained positive discrete-time periodic systems
N. Bougatef, M. Chaabane, O. Bachelier and D. Mehdi (Tunisia–France)
- 1569379667 Two-level active fault tolerant control approach
B. Boussaid, C. Aubrun and M. N. Abdelkrim (France–France)
- 1569386609 Microcontroller implementation of a robust discrete controller
S. Bouzaiane (Tunisia)

Thursday, 10h30-12h20

Session SAC 8 : Special Session on Robotic Systems

Chairs : H. Bezine (Tunisia)
G. Poisson (France)

- 1569371585 Traded and shared vision-force robot control for improved impact control
M. Bdiwi, A. Winkler, J. Suchý and G. Zschocke (Germany)
- 1569379135 Development of simulation environment for MEMS-based robot
G. El Din Amin, T. Atallah, R. Hammad and A. Mawla (Saudi Arabia)
- 1569386769 Communication and transferring data between ATRV2 mobile robot and PC using a TCP/IP “client/server”
A. Messaci, A. Oualid Djekoune and M. Belhocine (Algeria)
- 1569387045 Multi-robot target pursuit: towards an opportunistic control architecture
S. Keshmiri and S. Payandeh (Canada)

1569387209	On the trajectory tracking and coordination of multi-robot systems with communication delay <i>Y. Bouteraa, G. Poisson, J. Ghommam and N. Derbel</i> (France–Tunisia)
1569387257	Target tracking by visual servoing <i>N. Djelal, N. Mechat and N. Saadia</i> (Algeria)
1569421413	Dynamic modeling of a multi-fingered robot hand in free motion <i>R. Boughdiri, H. Bezine, N. K. M’Sirdi, A. Naamane and A. M. Alimi</i> (Tunisia–France)

Thursday, 12h20-14h20

Lunch


Thursday, 14h20-16h10
Session SAC 9 : Special Session on Nonlinear Observers 2
Chairs : M. Farza (France) M. M’Saad (France)
1569371559 Decentralized observer based tracking control of uncertain interconnected systems <i>A.S. Tlili and N. Benhadj Braiek</i> (Tunisia)
1569372801 Fuzzy adaptive gain controller for a class of nonlinear systems <i>E. EL-Madbouly, M. Hashim, B. Abouzalam and Y. Kabil</i> (Egypt)
1569387189 Discrete fuzzy high gain observer for a class of nonlinear systems <i>M. Oueder, M. Mihoub, R. Ben Abdennour and M. Farza</i> (Tunisia–France)
1569387381 UIO-based fault detection and isolation for a class of neutral system <i>A. Elhsoumi, R. Elharabi, S. B. A. Naoui and M. N. Abdelkrim</i> (Tunisia–France)
1569371651 State and unknown inputs estimations for multi-model descriptor systems <i>H. Hamdi, C. Mechmeche, M. Rodrigues and N. Benhadj Braiek</i> (Tunisia–France)

Thursday, 14h20-16h10
Session SAC 10 : Neural Networks
Chairs : K. M. Al-Aubidy (Jordan) M. M. Chtourou (Tunisia)
1569372251 Neural modeling and generalizing model of a Wheelchair-like mobile robot <i>A. Chamkhia and A. Chatti</i> (Tunisia)
1569385085 On the training of recurrent neural networks <i>M. Bennisr and M. Chtourou</i> (Tunisia)
1569387225 A comparative study of prediction in seabed mapping <i>G. Swadi, K. Aljebory and D. Holifield</i> (UK–Jordan)
1569387685 Artificial Neural Network Model for CO2 Absorption Column <i>R. Haddouche, M. S. Boumedine and B. Chetate</i> (Algeria)

1569387569 Indirect Neural Adaptive Control Strategy of Heating Regulation In a Building Zone
H. Lehouche, S. Ladjouzi, B. Mendil and H. Guéguen (Algeria–France)

1569377931 On the use of neural techniques for modeling and control the diving motion of the underwater vehicle Phantom 500
Y. Rkhissi and A. Chatti (Tunisia)

Thursday, 16h10-16h40



Coffee Break

Thursday, 16h40-18h20

Session SAC 11 : Fuzzy Systems

Chairs : M. Benrejeb (Tunisia)
P. Albertos (France)

1569399043 Fuzzy Terminal Sliding Mode Controller for Robot Arm Actuated by Pneumatic Artificial Muscles
A. Rezoug, S. Mahjoub, M. Hamerlain and M. Tadjine (Algeria–Tunisia)

1569387217 On the fuzzy control of a flexible single-link manipulator
R. Boucetta, S. Bel Hadj Ali and M. N. Abdelkrim (Tunisia)

1569386927 Functional description of a SCADA system using structured analysis real time method
M. N. Lakhoua (Tunisia)

1569387265 Design of fuzzy controller using genetic algorithms with new mutation operator
O. Guenounou, A. Belmehdi, B. Dahhou and N. Belkherchi .. (Algeria–France)

1569380461 Distributed dynamics approximation through lumping and fuzzy clustering: reliability and validity issues
A. Habbi and M. Kidouche (Algeria)

1569372815 Maximum power point neuro-fuzzy tracker for photovoltaic arrays
W. F. Mohammad, K. M. Al-Aubidy and M. M. Ali (Jordan)

Thursday, 16h40-17h30

Session SAC 12 : Multivariable Control

Chairs : N. Benhadj Braiek (Tunisia)
M. N. Abdelkrim (Tunisia)

1569387165 MIMO nonlinear control based on divided difference filters
H. Salhi, F. Bouani and M. Ksouri (Tunisia)

1569386457 New discrete multivariable sliding mode control for multi-periodic disturbances rejection
K. Dehri, M. Ltaief and A. S. Nouri (Tunisia)

1569387177 Decoupling model reference adaptive control of TWIN rotor system using hyperstability theory
A. Chelihi and D. Boukhetal (Algeria)

Thursday, 16h40-17h30

Session SAC 13 : Large Scale and Infinite Dimension Systems

Chairs : N. Benhadj Braiek (Tunisia)
M. N. Abdelkrim (Tunisia)

- 1569386749 Simulation method of fractional systems based on the discrete-time approximation of the Caputo fractional derivative
M. Aoun, M. Amairi, S. Najar and M. Abdelkrim (Tunisia)
- 1569369003 Comparison of identification techniques for fractional models
A. Jalloul, K. Jelassi, P. Melchior and J.-C. Trigeassou (Tunisia–France)
- 1569377901 Fault-tolerant tracker for a class of unknown interconnected nonlinear systems with input constraint
J. S. H. Tsai, Y. C. Shiu and S. M. Guo (Taiwan)
- 1569387345 Robust fault dagnosis on chemical system by using uncertain bond graph model
R. Elharabi, B. Ould Bouamama, M. K. Ben Gayed and M. N. Abdelkrim
..... (France–Tunisia)

Thursday, 19h00



Conference Dinner

Friday, 25 of March, 2011

Friday, 8h20-9h10

Session SAC 14 : Special Session on Control and Application of Chaos

Chairs : M. Feki (Tunisia)
A. A. El-Aroudi (Spain)

- 1569387343 Chaos in Chua circuit with fractional order low pass filter
M. Feki and I. El Gammoudi (Tunisia)
- 1569387363 Synchronizing fractional order chaotic systems with an integer order observer .
M. Feki and R. Gam (Tunisia)
- 1569386483 Semi-passive control of a torso-driven Compass-Gait biped robot: bifurcation and chaos
H. Gritli, N. Khraief and S. Belghith (Tunisia)
- 1569385601 Non-intrusive generalized polynomial chaos approach to the stability analysis of uncertain nonlinear dynamic systems
L. Nechak, S. Berger and E. Aubry (France)

Friday, 9h10-10h00

Session SAC 15 : Special Session on Backstepping Control

Chairs : F. Mnif (Oman)
J. Ghommam (Tunisia)

- 1569392775 Coordinated backstepping control of multiple robot system of the leader-follower structure
Y. Bouteraa, J. Ghommam and N. Derbel (France–Tunisia)
- 1569393049 Distributed backstepping control for synchronization of networked class of under-actuated systems: a passivity approach
J. Ghommam, Y. Bouteraa and F. Mnif (Tunisia–Oman)
- 1569378121 Adaptive backstepping neural network approach
M. Taktak-Meziou, J. Ghommam and N. Derbel (Tunisia)

Thursday, 10h00-10h30

Coffee Break



Friday, 10h30-12h20

Closure



Conference on Power Electrical Systems

Conference chair:

Ilhem Slama-Belkhodja (Tunisia)

University of Tunis, National School of Engineering of Tunis, Tunisia

Scientific Program committee:

Chairs:

Lotfi Krichen (Tunisia)

University of Sfax, National School of Engineering of Sfax, Tunisia

Ilhem Boutana (Algeria)

University of Jijel, Algeria

Members:

Jamel Belhadj (Tunisia)

Rafik Neji (Tunisia)

Hsan Hadj Abdallah (Tunisia)

Hafedh Trabelsi (Tunisia)

Mohamed El-Shimy Mahmoud Bekhet (Egypt)

Almoataz Youssef Abdelaziz (Egypt)

Ashraf Aboshosha (Egypt)

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Eric Monmasson (France)

Maria Pietrzak-David (France)

Luis Vicuna (Spain)

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Ammar Naassani (Syria)

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Mohamed Orabi (Egypt)

Faouzi Ben Ammar (Tunisia)

Mohamed Elleuch (Tunisia)

Khaled Jelassi (Tunisia)

Najiba Mrabet-Bellaaaj (Tunisia)

Mohamed Wissem Naouar (Tunisia)

Afef Ben Abdelghani-Bennani (Tunisia)

Houda Ben Attia-Sethom (Tunisia)

Tarek Ben Salah (Tunisia)

Jalel Ben Hadj Slama (Tunisia)

Mohamed F. Mimouni (Tunisia)

Rachid Dhifaoui (Tunisia)

Tarek Bouktir (Algeria)

Omar Houhali (Algeria)

Bernard Multon (France)

Abdessattar Guermazi (Tunisia)

Abderrazzak Yanguì (Tunisia)

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'11 : PES–Conference Program


	08 h 20 – 09 h 10	09 h 10 – 10 h 00	10 h 00 – 10 h 30	10 h 30 – 11 h 30	11 h 30 – 12 h 20	12 h 20 – 14 h 20	14 h 20 – 16 h 10	16 h 10 – 16 h 40	16h 40 – 18 h 20	18 h 20 – 19 h 00	
Monday March, 21							Registration				
Tuesday March, 22	Registration	Official Opening	Coffee Break	Plenary Session 1	Keynote Lecture PES L1	Lunch	Oral Session PES 1 & PES 2	Coffee Break	Oral Session PES 3 & PES 4	SSD Meeting	
Wednesday March, 23	Plenary Session 2	Keynote Lecture PES L2	Coffee Break	Oral Sessions PES 5 & PES 6		Lunch	SSD'11, Social Program				
Thursday March, 24	Plenary Session 3	Keynote Lecture PES L3	Coffee Break	Oral Sessions PES 7 & PES 8		Lunch	Oral Session PES9 & PES10	Coffee Break	Oral Session PES11	Conference Dinner at 21h00	
Friday March, 25	Oral Session PES 12		Coffee Break	Closure		Lunch	Post Conference Program				


Monday, 21 of March, 2011

Registration		<u>Monday, 15h00-19h00</u>
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Tuesday, 22 of March, 2011

Registration		<u>Tuesday, 8h20-9h00</u>
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Official Opening		<u>Tuesday, 9h00-10h00</u>
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Coffee Break		<u>Tuesday, 10h00-10h30</u>
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Plenary Session 1 : Chairs : H.-R. Tränkler (Germany) A. I. Saleem (Jordan)		<u>Tuesday, 10h30-11h30</u>
1569393147 Autonomous aerial vehicles: guidance, control, signal, and image processing platform		
<i>M. Al-Jarrah</i>		(UAE)

Keynote Lecture, Session KL-PES 1 : Chairs : G. M. Amer (Egypt) A. Ouali (Tunisia)		<u>Tuesday, 11h30-12h20</u>
1569393161 Micro grids toward the smart grid		
<i>J. Guerrero</i>		(Spain)

Lunch		<u>Tuesday, 12h20-14h20</u>
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Tuesday, 14h20-16h10

Session PES 1 : Power Electronic Converters 1

Chairs : F. Ben Ammar (Tunisia)
A. Guermazi (Tunisia)

- 1569371913 Comparison among three topologies of induction motor fed by inverter and controlled by DFC
M. Laabidi, B. Rebhi and F. Kourda (Tunisia)
- 1569372117 Current harmonic amplification in the sahel tunisian railway track system
F. Ouni and F. Ben Ammar (Tunisia)
- 1569385113 Induction machine DTC optimization using artificial intelligence for EV's applications
M. R. Hachicha, M. Ghariani and R. Neji (Tunisia)
- 1569372675 Damping of Power Systems Oscillations by Using STATCOM GA-based Optimal Controllers
A. F. Bati (Iraq)
- 1569371611 Observability analysis for parallel multi-cell chopper
B. Amghar, M. Darcherif and J. P. Barbot (France)
- 1569385133 Unified power flow controller for low voltage ride through capability of wind-based renewable energy grid-connected systems
S. Raphael and A. Massoud (Qatar)

Tuesday, 14h20-16h10

Session PES 2 : Power Systems 1

Chairs : M. Elleuch (Tunisia)
H. Hadj Abdallah (Tunisia)

- 1569386965 Dynamic neural network solution of the economic load dispatch problem
N. Goléa , G. Debbache and A. Goléa (Algeria)
- 1569387413 Coordination of PSS and TCSC Controller to Improve Power System Stability
A. Farah, T. Guesmi, H. Hadj Abdallah and A. Ouali (Tunisia)
- 1569387433 Optimal PMU placement for full network observability case of the tunisian network
A. Ayayda and F. Ghodbane (Tunisia)
- 1569387487 Enhancement of voltage stability in ultra high voltage electric network by static VAR compensation
O. Yahyaoui, R. Aowini, K. B. Kilani and M. Elleuch (Tunisia)
- 1569387689 Comparative performance study on using fixed vs. adaptive variable dead time SPAR in the 500 kV transmission network
O. E. Gouda, D. K. Ibrahim and D. H. Helmi (Egypt)
- 1569387835 Optimal location of multi type facts devices for multiple contingencies using genetic algorithms
I. Marouani, T. Guesmi, H. Hadj Abdallah and A. Ouali (Tunisia)

Tuesday, 16h10-16h40



Coffee Break

Tuesday, 16h40-18h20

Session PES 3 : Power Electronic Converters 2

Chairs : F. Ben Ammar (Tunisia)
T. Ben Salah (Tunisia)

- 1569397763 Compensation for neutral point potential in a three-level inverter using DTC strategy
I. Messaif, E. M. Berkouk and N. Saadia (Algeria)
- 1569387359 Analysis and comparison of multiphase DC/DC converters with coupled inductors in medium power applications
S. Barg and A. Ben Abdelghani-Bennani (Tunisia)
- 1569378881 Differential evolution for optimal power flow based shunt facts under contingent operation states
B. Mahdad and K. Srairi (Algeria)
- 1569387395 Improvement of fault critical time by HVDC transmission
R. Aouini, K. Ben Kilani, B. Marinescu and M. Elleuch (Tunisia–France)
- 1569387419 Fault Tolerant SVM Strategy for 3-Level NPC Inverter
H. Ben Abdelghani and A. Bennani Ben Abdelghani (Tunisia)
- 1569387453 DC bus sensor fault tolerant control of single phase PWM rectifier for electrical traction
A. B. Youssef, S. Khojet El Khil and I. Slama-Belkhodja (Tunisia)

Tuesday, 16h40-18h20

Session PES 4 : Renewable Energy Systems 1

Chairs : A. Ouali (Tunisia)
F. Mimouni (Tunisia)

- 1569364633 Wavelet autoregressive forecasting of climatic parameters for photovoltaic systems
C. Ben Salah, A. Ben Mabrouk and M. Ouali (Tunisia)
- 1569386873 Treatment Methodology of Erroneous and Missing Data in Wind Farm Dataset
L. Bouzidi, M. Mazigh, N. Mrabet Bellaaj and M. Elleuch (Tunisia)
- 1569371961 Study of performance of a variable-speed wind turbine with pitch control based on a permanent magnet synchronous generator
M. Mansour, M. N. Mansouri and M. F. Mimouni (Tunisia)
- 1569372125 Investigation of wind characteristics and wind power potential in el-Kef region, Tunisia
M. Abbes and J. Belhadj (Tunisia)
- 1569386729 Development of a grid connected photovoltaic power conditioning system based on flying capacitors inverter
M. Trabelsi and L. Ben-Brahim (Qatar)

Tuesday, 18h20-19h00

SSD Meeting



Wednesday, 23 of March, 2011

Wednesday, 8h20-9h10

Plenary Session 2 :

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

1569393159 Renewable energy, global warming, and the impact of power electronics
A. F. Zobaa (UK)

Wednesday, 9h10-10h00

Keynote Lecture, Session KL-PES 2 :

Chairs : J. Lutz (Germany)
A. Masmoudi (Tunisia)

1569393163 Electrical safety in health care area
G. M. Amer (Egypt)

Wednesday, 10h00-10h30

Coffee Break



Wednesday, 10h30-12h20

Session PES 5 : Special Session on Hybrid Renewable Energy Systems

Chairs : X. Roboam (France)
J. Belhadj (Tunisia)

1569372133 Battery sizing for a stand alone passive wind system using statistical techniques
M. Belouda, J. Belhadj, B. Sareni and X. Roboam (Tunisia–France)

1569386523 Theoretical and experimental study of control and energy management of a hybrid
wind-photovoltaic system
M. Dali, J. Belhadj and X. Roboam (Tunisia–France)

1569390765 Control and power management of a PEMFC-supercapacitor as a distributed
generator
D. Ketata and L. Krichen (Tunisia)

1569390775	Control and energy management of a hybrid power source including WECS-FC-SC	<i>A. Abdelkafi, L. Krichen and A. Ouali</i> (Tunisia)
1569390779	Control of an autonomous power generation system under three-phase connection defects	<i>A.-K. Masmoudi, L. Krichen and A. Ouali</i> (Tunisia)
1569397767	Techno-Economic Analysis for a Hybrid Stand-alone Power Generation	<i>A. H. Al-Badi, M. AL-Toobi, S. AL-Harthy and Z. Al-Hosni</i> (Oman)

Wednesday, 10h30-12h20

Session PES 6 : Electric Machines Modelling and Control 1

Chairs : A. Masmoudi (Tunisia)
R. Dhifaoui (Tunisia)

1569385353	Robust local state observers for nonlinear systems	<i>R. Ben Messaoud, N. Zanzouri and M. Ksouri</i> (Tunisia)
1569386525	Characterization of end effects of single-sided linear induction motor by analytical and numerical methods	<i>M. Hajji, M. A. Nasr Khoidja and B. Ben Salah</i> (Tunisia)
1569387271	Luenberger state observer for speed sensorless irfoc induction motor drives	<i>M. Jowili, K. Jarray, Y. Koubaa and M. Boussak</i> (Tunisia–France)
1569386465	Adaptive nonlinear control combined with unscented Kalman filter for permanent magnet synchronous motor fed by AC/DC/AC converter	<i>A. Titaouine, D. Taibi, O. Bennis, K. Yahia, R. Boumaraf and K. Yahia</i> (Algeria–Algeria)
1569387355	Continuous HFSI techniques applied to rotor position estimation of IPMSM at standstill and low speed - a survey	<i>O. Bel Hadj Brahim Kechiche, H. Sethom-Ben Attia, H. Sammoud and I. Slama-Belkhodja</i> (Tunisia)
1569385119	Thermal model for induction machine	<i>M. R. Hachicha, M. Ghariani and R. Neji</i> (Tunisia)

Wednesday, 12h20-14h20



Lunch

Wednesday, 14h30-19h00



SSD Conference Tour

Thursday, 24 of March, 2011

Thursday, 8h20-9h10

Plenary Session 3 :

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

1569393145 Bond graphs: an integrating tool for design of mechatronic systems
B. Ould Bouamama (France)

Thursday, 9h10-10h00

Keynote Lecture, Session KL-PES 3 :

Chairs : A. Zobaa (UK)
L. Krichen (Tunisia)

1569393165 Reliability of IGBT-based power devices in the viewpoint of applications in future
power supply systems
J. Lutz (Germany)

Thursday, 10h00-10h30

Coffee Break



Thursday, 10h30-12h20

Session PES 7 : Monitoring and Diagnostics

Chairs : E. Monmasson (France)
K. Jelassi (Tunisia)

1569372245 Fault detection and isolation of ship electric propulsion system using residual
generator
H. Dallagi, C. Mechmeche and N. Benhadj Braiek (Tunisia)

1569387097 Effectiveness of saliency-based methods in optimization of nn structure for induc-
tion motor fault diagnosis
I. Sansa, N. Bellaaj-Mrabet and M. Bouzid Ben Khader (Tunisia)

1569387105 Induction motor stator fault effect on a dual induction motor system supplied by
a single inverter
I. Helel Akacha, M. Bouzid Ben Khader and N. Bellaaj Mrabet (Tunisia)

1569386605 Reducing the effects of harmonics produced by electrical arc furnaces in Misurata
steel plant
M. B. Jannat and J. S. Abdulmalek (Libya)

1569386585 Power transformer fault classification based on dissolved gas analysis by fuzzy
logic
S. Souahlia, K. Bacha and M. Gossa (Tunisia)

Thursday, 10h30-12h20

Session PES 8 : Power Systems 2

Chairs : R. Dhifaoui (Tunisia)
F. Ghodbane (Tunisia)

- 1569365415 Determination of static voltage stability-margin of the power system prior to voltage collapse
M. K. Jalboub, H. S. Rajamani, R. A. Abd-Alhameed and A. M. Ithal ... (UK)
- 1569369503 The influence of different tariffs schemes on electricity consumption for the UK domestic buildings
A. M. Ithal, H. S. Rajamani, R. A. Abdalhameed and M. K. Jalboub (UK)
- 1569371997 Identifying the nature of domestic load profile from a single household electricity consumption measurements
A. M. Ithal, H. S. Rajamani, R.A. Abd-Alhameed and M. K. Jalboub (UK)
- 1569380065 Voltage collapse in the electric network and defense plan
C. Bouchoucha, M. N. Mansouri and M. F. Mimouni (Tunisia)
- 1569385965 Modeling of a three-phase underground power cable using the distributed parameters approach
T. Aloui, F. Ben Amar and H. Hadj Abdallah (Tunisia)
- 1569386735 Transient response of grounding grid systems simulation
O. E. Gouda, G. M. Amer and T. M. EL-Saied (Egypt)

Thursday, 12h20-14h20



Lunch

Thursday, 14h20-16h10

Session PES 9 : Electromagnetic Compatibility

Chairs : I. Boutana (Algeria)
J. Ben Hadj Slama (Tunisia)

- 1569393249 Effect of genetic algorithm parameters on convergence of the electromagnetic inverse method
S. Saidi and J. Ben Hadj Slama (Tunisia)
- 1569386547 Development of accurate uwb dielectric properties dispersion at cst simulation tool for modeling microwave interactions with numerical breast phantoms
A. Maher and K. M. Quboa (Iraq)
- 1569387313 The Study of the Performances of a Linear Induction MHD Pump
F. Z. Kadid, S. Drid and R. Abdessemed (Algeria)
- 1569387013 Effect of sample thickness on formability in electromagnetic aluminum sheet forming
I. Boutana (Algeria)

Thursday, 14h20-16h10

Session PES 10 : Renewable energy systems 2

Chairs : A. Ouali (Tunisia)
J. Belhadj (Tunisia)

- 1569389801 Performance analysis of a wind energy conversion system based on a doubly-fed induction generator
F. Hachicha and L. Krichen (Tunisia)
- 1569387839 Multi-layer neural network for sensorless MPPT control for wind energy conversion system using doubly fed twin stator induction generator
S. Nouali and A. Ouali (Tunisia)
- 1569397015 Nonlinear vector control strategy applied to a variable speed dfig generation system
J. Ben Alaya, A. Khedher and M. F. Mimouni (Tunisia)
- 1569373701 Optimization of two and three level full-scale voltage source converters for multi-MW wind power plants
M. Preindl (Italy)
- 1569387425 DSP-based emulator of distributed generation system
I. Maaoui-Ben Hassine, M. W. Naouar and I. Slama-Belkhodja (Tunisia)
- 1569389071 Supervisory for parallel operation of two dfig-based wind farm using variable wind speeds
S. Skander-Mustapha and I. Slama-Belkhodja (Tunisia)

Thursday, 16h10-16h40

Coffee Break



Thursday, 16h40-18h20

Session PES 11 : Variable Speed Generating Systems

Chairs : I. Slama-Belkhodja (Tunisia)
N. Mrabet-Bellaaj (Tunisia)

- 1569390857 Design of a switching table for direct power control of a dfig using sliding mode theory
A. Hemdani, M. Jebali-Ben Ghorbal and M. W. Naouar (Tunisia)
- 1569380653 Hinf control using sliding mode linearization technique applied to an induction motor
H. Benderradji, L. Chrifi-Alaoui and A. Makouf (Algeria–France)
- 1569387149 FPGA-Based Design of an Automatic Tracking Observer for Grid Synchronization
M. Ben Said, M. W. Naouar, H. Dhaouadi, S. Belkhodja and E. Monmasson (Tunisia–France)
- 1569386857 Sliding mode observer for mono-inverter bi-motors railway traction system
W. Ben Mabrouk, J. Belhadj and M. Pietrzak-David (Tunisia–France)
- 1569393653 Parity space approach for current sensor fault detection and isolation in electrical systems
H. Berriri, M. W. Naouara and I. Slama-Belkhodja (Tunisia)

1569393963 Wavelets and parity equations methods comparison for faulty encoder detection in PMSM drive
M. Bourogaoui, H. Berriri, H. Ben Attia-Sethom and I. Slama- Belkhodja
 (Tunisia)

Thursday, 19h00



Conference Dinner

Friday, 25 of March, 2011

Friday, 8h20-9h10

Session PES 12 : Electric Machines Modelling and Control 2

Chairs : A. Zobaa (UK)
 H. Trabelsi (Tunisia)

1569388155 Design and implementation of fuzzy logic based mras observer for speed sensorless vector control of induction motor
K. Negadi and A. Mansouri (Algeria)

1569397283 A Fuzzy Model Tracking Observer-based Control Design for a Permanent Magnet Synchronous Machine
J. Khedri, M. Chaabane, M. Souissi and D. Mehdi (Tunisia–France)


1569387691 Saturated Salient Pole Synchronous Machines: A critical study
K. M. Larbi and H. Rehaoulia (Tunisia)

1569387851 Classification of rotor fault in induction machine using Artificial Neural Networks
A. Drira and N. Derbel (Tunisia)

1569388571 Digital implementation using Delta operator for fpgabased induction motor emulator
M. Dagbagi, L. Charaabi, L. Idkhajine, E. Monmasson and I. Slama-Belkhodja
 (Tunisia–France)

1569389623 Fuzzy direct power control for PWM converters connected to the grid
B. Bouaziz, F. Bacha, R. Wamkeue and M. Gasmi (Tunisia)

Thursday, 10h00-10h30



Coffee Break

Friday, 10h30-12h20



Closure

Conference on Communication & Signal Processing

Conference chair:

Faouzi Derbel (Germany)
Qundis Advanced Measuring Solutions, Germany

Scientific Program committee:

Chairs:

Ahmed Ben Hamida (Tunisia)
University of Sfax, National School of Engineering of Sfax, Tunisia

Najoua Essoukri Ben Amara (Tunisia)
University of Sousse, National School of Engineering of Sousse, Tunisia

Members:

Abdelaziz Kallel (Tunisia)	Khalifa Djemel (France)
Abdellatif Ennaji (France)	Khalil Drira (France)
Abdelwaheb Belaid (France)	Lamia Chaari Fourati (Tunisia)
Abdulrahman Qawsmi (Jordan)	Lamia Sellami Ben Hmida (Tunisia)
Achraf Makhloufi (Tunisia)	Lassaad Ammari (Tunisia)
Adel Alimi (Tunisia)	Leohard Reindl (Germany)
Adel Ghezal (Tunisia)	Lionel Prevost (France)
Ahmed Ben Atitallah (Tunisia)	Lotfi Kamoun (Tunisia)
Ahmed Rekik (Tunisia)	Lotfi Mtibaa (Tunisia)
Ali Gharsallah (Tunisia)	Mahmoud Abdellaoui (Tunisia)
Ammar Bouallegue (Tunisia)	Mohamed Ali Ben Ayed (Tunisia)
Axel Sikora (Germany)	Mohamed ben Slima (Tunisia)
Azza Ouled Zaid (Tunisia)	Mohamed Deriche (Saudi Arabia)
Basel Solaiman (France)	Mohamed Deriche (Saudi Arabia)
Berthold Lankl (Germany)	Mohamed Ghorbel (Tunisia)
Besma Roui Abidi (USA)	Mohamed Hammami (Tunisia)
Boulbeba Ben Amor (France)	Mohamed K. Nezami (Jordan)
Chokri Ben Amar (Tunisia)	Mohamed Masmoudi (Tunisia)
Chokri Souani (Tunisia)	Mokhtar Sellami (Algeria)
Christian Olivier (France)	Mondher Frikha (Tunisia)
Clemency Perrine (France)	Nawres Khelifa (Tunisia)
Dominique Dallet (France)	Noura Sellami (Tunisia)
Dominique Dallet (France)	Noureddine Ellouze (Tunisia)
Driss Mammass (Morocco)	Nouri Masmoudi (Tunisia)
Fakhreddine Karray (Canada)	Omer Daoud (Jordan)
Faouzi Bouslama (Canada)	Philippe Vanheeghe (France)
Frederic Cuppens (France)	Rached Tourki (Tunisia)
Frederic Maussang (France)	

Halim Sghaer (Tunisia)	Radu Popescu-Zeletin (Germany)
Hichem Frigui (USA)	Ridha Bouallegue (Tunisia)
Hichem Maaref (France)	Ridha Ghayoula (Tunisia)
Ines Kammoun (Tunisia)	Salem Hasnaoui (Tunisia)
Joachim Speidel (Germany)	Su Ruan (France)
Kais Mnif (Tunisia)	Taoufik Aguilu (Tunisia)
Kais Ouni (Tunisia)	Tijani Chahed (France)
Kamel Besbes (Tunisia)	Til Aach (Germany)
Kamel Hamrouni (Tunisia)	Walid Mahdi (Tunisia)
Karl Holger (Germany)	Yassine Ben Ayed (Tunisia)
Kasim Elaubidy (Jordan)	Yves Delignon (France)
Khaled Daqrooq (Jordan)	Zied Lachiri (Tunisia)

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'11 : CSP–Conference Program


	08 h 20 – 09 h 10	09 h 10 – 10 h 00	10 h 00 – 10 h 30	10 h 30 – 11 h 30	11 h 30 – 12 h 20	12 h 20 – 14 h 20	14 h 20 – 16 h 10	16 h 10 – 16 h 40	16h 40 – 18 h 20	18 h 20 – 19 h 00	
Monday March, 21							Registration				
Tuesday March, 22	Registration	Official Opening	Coffee Break	Plenary Session 1	Keynote Lecture CSP L1	Lunch	Oral Session CSP 1 & CSP 2	Coffee Break	Oral Session CSP 3 & CSP 4	SSD Meeting	
Wednesday March, 23	Plenary Session 2	Keynote Lecture CSP L2	Coffee Break	Oral Sessions CSP 5 & CSP 6		Lunch	SSD'11, Social Program				
Thursday March, 24	Plenary Session 3	Keynote Lecture CSP L3	Coffee Break	Oral Sessions CSP 7 & CSP 8		Lunch	Oral Session CSP 9	Coffee Break	Oral Session CSP 10 & CSP 11	Conference Dinner at 21h00	
Friday March, 25	Oral Session CSP 12		Coffee Break	Closure		Lunch	Post Conference Program				


Monday, 21 of March, 2011

Registration		<u>Monday, 15h00-19h00</u>
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Tuesday, 22 of March, 2011

Registration		<u>Tuesday, 8h20-9h00</u>
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Official Opening		<u>Tuesday, 9h00-10h00</u>
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Coffee Break		<u>Tuesday, 10h00-10h30</u>
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Plenary Session 1 :	<u>Tuesday, 10h30-11h30</u>
Chairs : H.-R. Tränkler (Germany) A. I. Saleem (Jordan)	
1569393147 Autonomous aerial vehicles: guidance, control, signal, and image processing platform <i>M. Al-Jarrah</i> (UAE)	

Keynote Lecture, Session KL-CSP 1 :	<u>Tuesday, 11h30-12h20</u>
Chairs : M. Deriche (Saudi Arabia) K. M. Al-Aubidy (Jordan)	
1569393169 Integration of knowledge to support automatic object reconstruction from images and 3D data <i>F. Boochs, H. Ben Hmida, H. Truong, A. Marbs, A. Karmacharya, C. Cruz, , A. Habed, , C. Nicolle and Y. Voisin</i> (Germany)	

Tuesday, 12h20-14h20



Lunch

Tuesday, 14h20-16h10

Session CSP 1 : Digital Signal Processing

Chairs : R. Mahir (Jordan)
N. Derbel (Tunisia)

- 1569384911 MCMC for parameters estimation by bayesian approach
H. Ait Saadi, F. Ykhlef and A. Guessoum (Algeria)
- 1569386643 Stochastic algorithm for channel optimized vector quantization: application to
robust narrow-band speech coding
M. Bouzid, H. Benkherouf and K. Benzadi (Algeria)
- 1569386819 Packet loss replacement in voip using a recursive low-order autoregressive model-
based speech
S. Miralavi, S. Ghorshi, M. Mortazavi and J. Choupan (Iran)
- 1569387325 Woven fabric defects detection based on texture classification algorithm
Y. Ben Salem and S. Nasri (Tunisia)
- 1569387415 Automatic determination of pathological voice transformation coefficients for TD-
PDOLA using neural network
B. Haythem and C. Adnane (Tunisia)
- 1569406305 A subspace algorithmwith quadratic complexity for blind multi-channel equaliza-
tion
H. Gazzah (UAE)

Tuesday, 14h20-16h10

Session CSP 2 : Antennas and Microwave

Chairs : T. Tutunji (Jordan)
M. N. Abdelkrim (Tunisia)

- 1569354484 Null placement in linear array pattern via position perturbation using particle
swarm optimization technique
A. Recioui and H. Bentarzi (Algeria)
- 1569371799 Unitary RD-MUSIC algorithm for directions of arrival estimation of coherent
sources with espar antennas
S. Akkar, F. Harabi and A. Gharsallah (Tunisia)
- 1569378443 Directions of arrival estimation using conventional arrays and ESPAR antennas
with circular and concentric circular arrays shapes
S. Akkar, F. Harabi and A. Gharsallah (Tunisia)
- 1569386807 Antennas design for multistandard terminals
Y. Belhadef and N. Boukli Hacene (Algeria)
- 1569386949 Wideband microstrip patch fractal antennas
M. Hadji and S. M. Meriah (Algeria)

Tuesday, 16h10-16h40



Coffee Break

Tuesday, 16h40-18h20

Session CSP 3 : Optical Communication Systems

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

- 1569372035 Microwave imaging of dielectric cylinder using level set method and conjugate gradient algorithm
K. Grayaa, T. Aguilu and A. Bouzidi(Tunisia)
- 1569372317 Reducing WI-FI handover delay using a new positioning process
Z. Monji, B. Jam and R. Tourki(Tunisia)
- 1569372327 A new wave concept iterative method in cylindrical coordinates for modeling of circular planar circuits
Z. Houaneb, H. Zairi, A. Gharsallah and H. Bau(Tunisia–France)
- 1569379631 Microwave imaging for conducting scatterers by hybrid particle swarm optimization with simulated annealing
B. Mhamdi , K. Grayaa and T. Aguilu(Tunisia)
- 1569387227 Adaptive resource allocation scheme using sliding window subchannel gain computation: context of OFDMA wireless mobiles systems
F. Khelifa, W. Ben Hassen, M. Afif and A. Samet(Tunisia)
- 1569387443 Priority image transmission in wireless sensor networks
M. Nasri, A. helali, H. Sghaier and H. Maaref(Tunisia)

Tuesday, 16h40-18h20

Session CSP 4 : Image Processing

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

- 1569372181 An automated vessel segmentation of retinal images using multiscale vesselness
B. Mariem, J. Malek, K. Krissian and R. Tourki(Tunisia–Spain)
- 1569372219 A developed unsharp masking method for images contrast enhancement
A. Zaafour, M. Sayadi and F. Fnaiech.....(Tunisia)
- 1569387261 Implementation of RC5 and RC6 block ciphers on digital images
A. Belhaj Mohamed, G. Zaibi and A. Kachouri(Tunisia)
- 1569387401 Image Denoising using non linear diffusion tensors
F. Benzart and H. Amiri.....(Tunisia)
- 1569391161 A modified unsharp-masking technique for image contrast enhancement
I. F. Jafar and K. Darabkh(Jordan)
- 1569372167 Fast Prototyping H.264 Deblocking filter using ESL tools
T. Damak, I. Werda, N. Masmoudi and S. Bilavarn(Tunisia–France)

Tuesday, 18h20-19h00



SSD Meeting

Wednesday, 23 of March, 2011

Wednesday, 8h20-9h10

Plenary Session 2 :

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

1569393159 Renewable energy, global warming, and the impact of power electronics
A. F. Zobaa (UK)

Wednesday, 9h10-10h00

Keynote Lecture, Session KL-CSP 2 :

Chairs : M. Ajour (Jordan)
A. Masmoudi (Tunisia)

1569393175 The art of assessing quality for images and video
M. Deriche (Saudi Arabia)

Wednesday, 10h00-10h30

Coffee Break



Wednesday, 10h30-12h20

Session CSP 5 : Medical Imaging

Chairs : M. Al-Jarah (UAE) (U.A.E.)
J. Ghommam (Tunisia)

- 1569382193 Speckle noise reduction in breast ultrasound images: SMU (srad median unsharp) approach
I. Njeh, O. B. Sassi, K. Chtourou and A. Ben Hamida (Tunisia)
- 1569386555 Development of accurate UWB dielectric properties dispersion at CST simulation tool for modeling microwave interactions with numerical breast phantoms
M. Q. Kaydar and A. Maher (Iraq)
- 1569386827 A Kalman filter technique applied for medical image reconstruction
S. Goliaei, S. Ghorshi, M. T. Manzuri and M. Mortazavi (Iran)
- 1569386885 Towards factor analysis exploration applied to positron emission tomography functional imaging for breast cancer characterization
W. Rekik, I. Ketata, L. Sellami, K. Chtourou, M. Ben slima, S. Ruan and A. Ben Hamida (Tunisia-France)
- 1569387207 Separation of transient and oscillatory cerebral activities using over-complete rational dilation wavelet transforms
S. Chaibi, T. Lajnef, A. Kachouri and M. Samet (Tunisia)
- 1569387377 Automatic detection of slow-wave sleep and REM-sleep stages using polysomnographic ECG signals
S. Khemiri, K. Aloui and M. S. Naceur (Tunisia)

Wednesday, 10h30-12h20

Session CSP 6 : Biometry and Pattern Recognition

Chairs : M. Al-Jarah (UAE) (U.A.E.)
J. Ghommam (Tunisia)

- 1569369027 Feature-level fusion from facial expressions and physiological signals for emotion recognition
F. Abdat, C. Maaoui and A. Pruski (France)
- 1569369029 Anthropometrical-SVM based method for emotion recognition from facial expression
F. Abdat, C. Maaoui and A. Pruski (France)
- 1569386413 3D face recognition using multimatcher approach
S. Said, M. Borgi, B. Ben Amor and C. Ben Amar (Tunisia-France)
- 1569386497 Efficient features extraction for fingerprint classification with multi layer perceptron neural network
I. El-Feghi, A. Tahar, H. Aboaiasha and X. Zhijie (Libya)
- 1569397595 Multimodal biometric system based palmprint and iris
R. Boukhris-Trabelsi, I. Khanfir-Kallel and D. Sellami-Masmoudi (Tunisia)
- 1569397939 Biometric based audio ownership verification using discrete wavelet transform and SVD techniques
M. Al-Yaman, M. A. Al-Tae, A. Shahrour and I. Al-Husseini (Jordan)

Wednesday, 12h20-14h20

Lunch



Wednesday, 14h30-19h00

SSD Conference Tour



Thursday, 24 of March, 2011

Thursday, 8h20-9h10

Plenary Session 3 :

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

- 1569393145 Bond graphs: an integrating tool for design of mechatronic systems
B. Ould Bouamama (France)

Thursday, 9h10-10h00

Keynote Lecture, Session KL-CSP 3 :

Chairs : M. Ajour (Jordan)
A. Masmoudi (Tunisia)

1569393177 Detecting corner points from digital curves
M. Sarfraz (Kuwait)

Thursday, 10h00-10h30

Coffee Break



Thursday, 10h30-12h20

Session CSP 7 : Image and Video Compression

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

1569380467 DSP-based half-pel motion estimation implementation for H.264 baseline encoder
A. Kessentini, I. Werda, T. Damak, A. Samet and N. Masmoudi (Tunisia)

1569384209 Determination of camera's cycab position
R. Loukil, D. Bouchaala and Y. Dumortier (Tunisia)

1569386443 Efficient hardware solution for low power and adaptive image compression in
wireless sensor networks
B. O. Boufiene (Tunisia)

1569386739 A parallel processing architecture for FSS block-matching motion estimation ..
S. Dhahri, A. Zitouni and R. Tourki (Tunisia)

1569386865 Color image segmentation using automatic thresholding techniques
E. B. Braiek and R. Harrabi (Tunisia)

1569389003 Object recognition using particle swarm optimization on geometrical descriptors
M. Sarfraz (Kuwait)

Thursday, 10h30-12h20

Session CSP 8 : Speech Recognition

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

- 1569387179 Study of speech analysis techniques for the phonemes classification using fuzzy logic
I. Ben Fredj and K. Ouni (Tunisia)
- 1569387301 Performance evaluation of the symmetric tight wavelet frame in speech coding .
S. Bousselmi and K. Ouni (Tunisia)
- 1569387339 Efficient wavelet packet features for pathological voices identification using multilayer perceptron
L. Salhi, M. Talbi, S. Abid and A. Cherif (Tunisia)
- 1569387845 Application of evolutionary recurrent som for phonemes recognition
M. S. Salhi and N. Ellouze (Tunisia)
- 1569397937 Development of improved automatic music transcription system for the Arabian Flute (NAY)
F. M. Al-Ghawanmeh, I. F. Jafar, M. A. Al-Taee, M. Al-Ghawanmeh and Z. Muhsini (Jordan)

Thursday, 12h20-14h20



Lunch

Thursday, 14h20-16h10

Session CSP 9 : Telecommunication Systems

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

- 1569367373 Experimental investigation of the GSM transmission quality in the vicinity of the power line system
S. Ghnimi, A. Rajhi, , A. Gharsallah, , F. Khelifa and F. B. Abdellah (Tunisia)
- 1569371545 The Study of the impact of architecture design on cognitive radio
M. Hentati, A. Nafkha, X. Zhang, P. Leray, J. F. Nezan and M. Abid (France–Tunisia)
- 1569386791 A five-port reflectometer for communication receiver applications
I. Sfar, L. Osman and A. Gharsallah (Tunisia)
- 1569386901 Design of a new six-port circuit using multilayer technology
Z. Saddi, M. Traii, M. Nedil and H. Trabelssi (Tunis-Canada)
- 1569387243 A simple UWB-chaotic generator based on memristor switching model
N. Rebhi, M. Samet, A. Kachouri, D. F. Prunaret and P. Chargé (Tunisia–France)
- 1569387427 Nonlinear power amplifier sensitivity and effects on behavioural model performance
C. Jebali, N. Boulejfen, A. Gharsallah and F. M. Ghannouchi (Tunisia–Saudi Arabia–Canada)

Thursday, 16h10-16h40



Coffee Break

Thursday, 16h40-18h20

Session CSP 10 : Communication Networks

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

- 1569386627 Phase asynchrony and the coherent detection of physical network coding
A. Yongacoglu and P. Marchand (Canada)
- 1569387081 Optimized power trace numbers in CPA attacks
N. Benhadjyoussef, M. Machhout and R. Tourki (Tunisia)
- 1569387129 The relative entropy as a tool to analyse the intrusion based on Bužek-Hillery machine
B. Othmanif, M. Mohsen, H. Belmabrouk, H. Mejri and R. Tourki (Tunisia)
- 1569387387 A modular router architecture design for network on chip
B. Attia, W. Chouchene, A. Zitouni, N. Abid and R. Tourki (Tunisia)
- 1569387411 A low power network interface for network on chip
W. Chouchene, B. Attia, A. Zitouni, N. Abid and R. Tourki (Tunisia)
- 1569391425 Towards self-configurable overlay networks
I. Al-Oqily, A. Alshtnawi and K. M. Al-Aubidy (Jordan)

Thursday, 16h40-18h20

Session CSP 11 : Wireless Communication Systems

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

- 1569371903 New approach for wireless underwater identification: acoustic frequency identification (AFID)
N. Nasri, A. Kachouri, L. Andrieux and M. Samet (Tunisia–France)
- 1569376757 A new kernel-based neural network for sea target detection
S. Mirghasemi and A. I. Khayati (Iran)
- 1569380881 The pilot-induced cyclostationarity approach for The OFDM WIFI identification

N. Alyaoui, H. Ben Hnia, A. Kachouri and M. Samet (Tunisia)
- 1569387077 Attacks management in all-optical networks
A. Jedidi, N. Ghamgui and M. Abid (Tunisia)
- 1569387185 A study of received pulse shape on DIPP system over indoor optical wireless channel via diffuse link
A. Buhafa, B. Al-Nedawe and M. Sibley (UK)
- 1569387223 IBE-Trust implementation for data centric wireless sensor networks
Y. M. Yussoff and H. Hashim (Malaysia)

Thursday, 19h00



Conference Dinner

Friday, 25 of March, 2011

Friday, 8h20-9h10

Session CSP 12 : Special Session on Information Technology Systems for Arabic Related Languages

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

- 1569386243 F_0 contour modeling using mars for arabic TTS synthesis
Z. Mnasri, F. Boukadida and N. Ellouze (Tunisia)
- 1569386629 A 35 GHZ conformal microstrip patch antenna
Z. Zaalouni, M. Traii, N. Mourad and H. Trabelsi (Tunisia-Canada)
- 1569386825 Combining fuzzy ART And RBF networks for arabic handwriting recognition .
L. Chergui, K. Maâmar and S. Chikhi (Algeria)
- 1569421415 On-line arabic handwriting segmentation via perceptual codes: application to MAYASTROUN database
S. Njah, H. Bezine and A. M. Alimi (Tunisia)

Thursday, 10h00-10h30



Coffee Break

Friday, 10h30-12h20



Closure

Conference on Sensors, Circuits & Instrumentation Systems

Conference chair:

Lotfi Kamoun (Tunisia)

University of Sfax, National School of Engineering of Sfax, Tunisia

Scientific Program committee:

Chairs:

Dorra sellami Masmoudi (Tunisia)

University of Sfax, National School of Engineering of Sfax, Tunisia

Hamadi Ghariani (Tunisia)

University of Sfax, National School of Engineering of Sfax, Tunisia

Aimé Lay Ekuakillé (Italy)

University of Salento, Italy

Members:

A J Marques Cardoso (Portugal)

Abdennaceur Kachouri (Tunisia)

Acácio Manuel Raposo Amaral (Portugal)

Aktham Asfour (France)

Alexander Kalashnikov (UK)

Alfredo Paolillo (Italy)

Amerigo Trotta (Italy)

Andrea Cataldo (Italy)

Andrea Cusano (Italy)

Àngel Cuadras (Spain)

Anton Fuchs (Austria)

António Serra (Portugal)

Axel Sikora (Germany)

Bernhard Zagar (Austria)

Biserka Runje (Hongrie)

Bruno Ando (Italy)

Dan Stefanescu

Dariusz Kacprzak (New Zealand)

Dieter Pawelczak (Germany)

Dominik Sankowski (Poland)

Dominique Dallet (France)

Dubravko Risovic (Hongrie)

Edoardo Fiorucci (Italy)

Emilia Nunzi (Italy)

Enver Sadikoglu (Turkey)

Erik Markert (Germany)

Esperanza Manso (Spain)

Fatima Djerfaf (Algeria)

Filippo Molinari (Italy)

Francisco J. García Leoro (Chile)

Francisco Javier Ferrero Martin (Spain)

Francisco Marcos de Assis (Brasil)

Marco Jose da Silva (Brasil)

Marco Mugnaini (Italy)

Marco Parvis (Italy)

Marek Zielin'ski (Poland)

Marija Cundeva Blajer (MK)

Mario Luiso (Italy)

Michele Norgia (Italy)

Mitsuru Baba (Japan)

Mladen Banovic

Mohamed Masmoudi (Tunisia)

Mongi Lahiani (Tunisia)

Mounir Samet (Tunisia)

Mourad Loulou (Tunisia)

Nicola Donato (Italy)

Nicola Pitrone (Italy)

Ningde Jin (China)

Nouri Masmoudi (Tunisia)

Numan Durakbasa (Austria)

Paolo carbone (Italy)

Pascal Dupuis (Belgique)

Pedro Albertos (Spain)

Pedro Ramos (Portugal)

Perfecto Mariño (Spain)

Piero Malcovati (Italy)

Rama Murthy, Garimella (India)

Ramasamy Srinivasan (India)

Raul Carneiro Martins (Portugal)

Roberto Sanchis Llopis (Spain)

Roman Malaric (Hongrie)

Roman Szewczyk (Poland)

Ruben Usamentiaga Fdez (Spain)

Ryszard Roskosz (Poland)

Gabriella Tognola (Italy)
George Page (UK)
Gerhard Fischerauer (Germany)
Giada Giorgi (Italy)
Giovanni Bucci (Italy)
Guohui Li (China)
Hua Wang (China)
Iuri Frosio (Italy)
Jacek Piskorowski (Poland)
Jordi Cusidó i Roura (Spain)
Jordi Palacin (Spain)
Josef Preishuber-Pfluegl (Austria)
Jouko Halttunen (Finland)
Juha Kostamovaara (Finland)
Konstantin Rozanov (Russia)
Luc Taerwe (Belgique)
Ludwik Finkelstein (UK)
Luigi rovati (Italy)
Maarten Steinbuch (Netherlands)
Marcantonio Catelani (Italy)
Marco Faifer (Italy)

Ryszard Roskosz (Poland)
Samuel E. de Lucena (Brasil)
Saša Vlahinic (Hongrie)
Sergey V. Muravyov (Russia)
Shin-Won Kang (Korea)
Stelios Siskos (Greece)
Subhas Mukhopadhyay (New Zealand)
Theodore Laopoulos (Greece)
Tina Liguori (Italy)
Tom Moir (New Zealand)
Tomasz Tarasiuk (Poland)
Valeria Scarano (Italy)
Vasileios Konstantakos (Greece)
Vedran Bilas (Hongrie)
Vittorio Ferrari (Italy)
Vladimír Haasz (Czech Republic)
Volker Hans (Germany)
Werner Brenner (Austria)
Wojciech Toczek (Poland)
Yago (Spain)
Zbigniew Leonowicz (Poland)

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'11 : SCI-Conference Program


	08 h 20 – 09 h 10	09 h 10 – 10 h 00	10 h 00 – 10 h 30	10 h 30 – 11 h 30	11 h 30 – 12 h 20	12 h 20 – 14 h 20	14 h 20 – 16 h 10	16 h 10 – 16 h 40	16h 40 – 18 h 20	18 h 20 – 19 h 00	
Monday March, 21							Registration				
Tuesday March, 22	Registration	Official Opening	Coffee Break	Plenary Session 1	Keynote Lecture SCI L1	Lunch	Oral Session SCI 1	Coffee Break	Oral Session SCI 2	SSD Meeting	
Wednesday March, 23	Plenary Session 2	Keynote Lecture SCI L2	Coffee Break	Oral Sessions SCI 3		Lunch	SSD'11, Social Program				
Thursday March, 24	Plenary Session 3	Keynote Lecture SCI L3	Coffee Break	Oral Sessions SCI 4		Lunch	Oral Session SCI 5 & SCI 6	Coffee Break	Oral Session SCI 7	Conference Dinner at 21h00	
Friday March, 25	Oral Session SCI 8		Coffee Break	Closure		Lunch	Post Conference Program				


Monday, 21 of March, 2011

Registration		<u>Monday, 15h00-19h00</u>
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Tuesday, 22 of March, 2011

Registration		<u>Tuesday, 8h20-9h00</u>
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Official Opening		<u>Tuesday, 9h00-10h00</u>
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Coffee Break		<u>Tuesday, 10h00-10h30</u>
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Plenary Session 1 : Chairs : H.-R. Tränkler (Germany) A. I. Saleem (Jordan) 1569393147 Autonomous aerial vehicles: guidance, control, signal, and image processing platform <i>M. Al-Jarrah</i> (UAE)	<u>Tuesday, 10h30-11h30</u>
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Keynote Lecture, Session KL-SCI 1 : Chairs : H.-R. Tränkler (Germany) A. I. Saleem (Jordan) 1569389001 Signals in system identification: different waveforms for different cases <i>M. Min</i> (Estonia)	<u>Tuesday, 11h30-12h20</u>
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Lunch		<u>Tuesday, 12h20-14h20</u>
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Tuesday, 14h20-16h10

Session SCI 1 : Special Session on Biomedical and Environmental Measurements & Instrumentation 1

Chairs : R. Mahir (Jordan)
N. Derbel (Tunisia)

- 1569387037 Real-time measurement of time variant R, L and C components
D. Amicone, L. Ferrigno, C. Liguori, M. Laracca and A. Pietrosanto .(Italy)
- 1569387041 Full-wave analysis of reconfigurable antenna sensors for Non-Invasive melanoma detection
D. Caratelli, A. Massaro, A. Lay-Ekuakille, R. Cingolani and A. Yarovoy (Netherlands)
- 1569387145 Image Processing for the Detection of Dermoscopic Criteria: Irregular Dots and Atypical Vascular Pattern
G. Di Leo, G. Fabbrocini, A. Paolillo and P. Sommella (Italy)
- 1569387361 A postural stability analysis by using plantar pressure measurements
S. Boukhenous and M. Attari..... (Algeria)
- 1569387383 Signal processing transmitter for wireless implantable neural recording systems
N. Soltana, G. Ben Hmida, M. Samet and A. Kachouri (Tunisia)

Tuesday, 16h10-16h40

Coffee Break



Tuesday, 16h40-18h20

Session SCI 2 : Sensors and Measurement Systems 1

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

- 1569387035 Strain gauges and Wheatstone bridges - basic instrumentation and new applications for electrical measurement of non-electrical quantities
D. M. Stefanescu(Romania)
- 1569386765 Conception of a biomedical transducer for characterization of the cortical bone
K. Saidi, Y. Remram and M. Attari (Algeria)
- 1569387025 Non destructive testing for cracks in perforated sheet metals
M. Heidary Dastjerdi , M. Rübesam, D. Rüter, J. Himmel, O. Kanoun and J. Himmel(Germany)
- 1569379901 Analysis of the parameters of a lossy coaxial cable for cable fault location
Q. Shi, U. Tröltzsch and O. Kanoun (Germany)
- 1569398083 Active electrodes for broadband bioimpedance spectroscopy
M. Rist, P. Annus, M. Min and R. Land (Estonia)
- 1569390165 A new human identification based on fusion fingerprints and faces biometrics using LBP and GWN descriptors
N. Gargouri-Ben Ayed, A. Damak-Masmoudi and D. Sellami-Masmoudi (Tunisia)

Tuesday, 18h20-19h00



SSD Meeting

Wednesday, 23 of March, 2011

Wednesday, 8h20-9h10

Plenary Session 2 :

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

1569393159 Renewable energy, global warming, and the impact of power electronics
A. F. Zobaa (UK)

Wednesday, 9h10-10h00

Keynote Lecture, Session KL-SCI 2 :

Chairs : M. Ajour (Jordan)
A. Masmoudi (Tunisia)

1569393179 Power supply for wireless sensor or actuator systems
L. M. Reindl (Germany)

Wednesday, 10h00-10h30



Coffee Break

Wednesday, 10h30-12h20

Session SCI 3 : Special Session on Biomedical and Environmental Measurements & Instrumentation 2

Chairs : M. Al-Jarah (UAE) (U.A.E.)
J. Ghommam (Tunisia)

1569390677 3D reconstruction of l-shaped surfaces using a rotating array of ultrasonic sensors
N. I. Giannoccaro, L. Spedicato and C. di Castri (Italy)

1569387811 Signals in system identification: different waveforms for different cases
M. Min and T. Parve (Estonia)

1569386421 Design of a digital communication system based on a xbee module for biomedical applications
N. Ghariani, M. Chaoui, H. Ghariani and M. Lahiani (Tunisia)

1569387393 Optical Demultiplexer Device: Frequency and optical bias analysis
P. Louro, M. Vieira, M. A. Vieira and M. Fernandes (Portugal)

1569387295 Assessment of Beef Meat Aging Using Impedance Spectroscopy
M. Guermazi, O. Kanoun and N. Derbel (Tunisia-Germany)

Wednesday, 12h20-14h20



Lunch

Wednesday, 14h30-19h00



SSD Conference Tour

Thursday, 24 of March, 2011

Thursday, 8h20-9h10

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


1569393145 Bond graphs: an integrating tool for design of mechatronic systems
B. Ould Bouamama (France)

Thursday, 9h10-10h00

Keynote Lecture, Session KL-SCI 3 :
Chairs : M. Ajor (Jordan)
 A. Masmoudi (Tunisia)

1569393181 From chemical or biochemical microsensors to fast detection systems
J. Pistré, C. Dejous and D. Rebiere (France)

Thursday, 10h00-10h30



Coffee Break

Thursday, 10h30-12h20

Session SCI 4 : Sensors and Measurement Systems 2
Chairs : A. Al-Saif (KSA)
 M. N. Abdelkrim (Tunisia)

1569385619 Instrumental platform controlled by labview for the power measurement and electric circuit characterisation
A. Haddouk, H. Mechergui and A. Ayari (Tunisia)

1569387249 Parameter's effect on basic DC to DC converter structures
N. Ben Amor, O. Kanoun and N. Derbel (Tunisia-Germany)

1569385339	Frequency study of ultra wide band signal energy attenuation during propagation in biological tissue	<i>M. Ketata, M. Chaoui, H. Ghariani and M. Lahiani</i> (Tunisia)
1569367819	Some aspects of electronic properties of schottky barrier photo detector	<i>W. F. Mohamad, N. N. Khatib and A. N. Saleh</i> (Jordan–Iraq)
1569386013	Detection of inhomogeneities in magneto-conductive objects	<i>J. Atzlesberger and B. G. Zagar</i> (Austria)
1569386757	A high performance fsk demodulator for Zero-If receiver in the 863-870-MHZ band application: wireless sensor	<i>H. Trabelsi and M. Masmoudi</i> (Tunisia)

Thursday, 12h20-14h20


Lunch

Thursday, 14h20-16h10		
Session SCI 5 : Nano Sensors, Nano Systems and Nano Technology		
Chairs : A. Al-Saif (KSA) M. N. Abdelkrim (Tunisia)		
1569386951	SI-C optical transducers with internal optical gain: an electrical approach	<i>M. A. Vieira, M. Vieira, P. Louro, J. Costa, M. Fernandes and M. Barata</i> (Portugal)
1569386595	Study and modelling hybrid MTJ/RING memory using simon simulator	<i>A. Boubaker, I. Krout and N. Sghaier</i> (Tunisia)
1569386737	A high temperature model for single-electron transistor with metallic quantum dots	<i>A. Touati, N. Sghaier and A. Kalboussi</i> (Tunisia)
1569386875	Drain current model for single electron transistor operating at high temperature	<i>I. Krout, M. A. Touati, A. Boubaker, N. Sghaier and A. Kalboussi</i> ... (Tunisia)
1569386943	Self amplification in SI-C optical transducers	<i>M. Vieira, P. Louro, M. A. Vieira, J. Costa, A. Fantoni and M. Fernandes</i> (Portugal)

Thursday, 14h20-16h10		
Session SCI 6 : Circuit Test, Device Characterization & Modelling 1		
Chairs : A. Al-Saif (KSA) M. N. Abdelkrim (Tunisia)		
1569372259	Output match and reserve isolation compensation of an inductively degenerated CMOS LNA using switchable resistor	<i>R. Ayadi and M. Masmoudi</i> (Tunisia)
1569387239	Type-2 digital input and output signal conditioning circuits for industrial safety applications	<i>O. A. S. Gorgis and L. M. Reindl</i> (Germany)

1569371123	K-Band two stages low noise amplifier design in microstrip technology	<i>M. Challal, A. Azrar and D. V. Janvier</i>	(Algeria–Belgium)
1569387587	Effect of High-Velocity Scenarios on the Performance of MIMO LTE Packet Scheduling	<i>S. P. Nonchev, R. Hamila and M. Valkama</i>	(Finland–Qatar)
1569385197	Aully integrated cmos data and clock recovery for wireless biomedical implants	<i>D. Daoud, M. Ghorbel and A. Ben Hamida</i>	(Tunisia–France)

Thursday, 16h10-16h40



Coffee Break

Thursday, 16h40-18h20

Session SCI 7 : Hardware Implementation

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

1569386763	Memory cache optimization for a digital signature program: case study	<i>M. W. Jmal, W. Kaaniche and M. Abid</i>	(Tunisia)
1569387001	Physical implementation for High-performance Reconfigurable SOC Chip	<i>Q. Zhu and P. Koltz</i>	(USA)
1569387023	Architecture and FPGA implementation of the Cordic algorithm for fingerprints recognition system	<i>N. Neji, A. Boudabous, W. Kharrat and N. Masmoudi</i>	(Tunisia)
1569387869	A two-dimensional numerical analysis of subthreshold behavior for deep submicron gate all around GaN-MESFETs	<i>N. Lakhdar, F. Djeflal, T. Bendib, M. A. Abdi and D. Arar</i>	(Algeria)
1569387873	Transconductance and OFF-current parameters optimization for gate stack double gate MOSFET using multi-objective genetic algorithms	<i>T. Bendib, F. Djeflal, T. Bentrchia, M. A. Abdi and D. Arar</i>	(Algeria)
1569390875	Planar array antenna pattern nulling based on sequential quadratic programming (SQP) algorithm	<i>A. Hammami, R. Ghayoula and A. Gharsallah</i>	(Tunisia)


Thursday, 19h00



Conference Dinner

Friday, 25 of March, 2011

		<u>Friday, 8h20-9h10</u>
Session SCI 8 : Circuit Test, Device Characterization & Modelling 2		
Chairs :		
	A. Al-Saif (KSA)	
	M. N. Abdelkrim (Tunisia)	
1569379407	Design and parametric analysis of a very compact UWB antenna using a simple dra topology	
	<i>R. Gharbi, M. Glawi, H. Zairi, H. Trabelsi and A. Gharsalah</i>	(Tunisia)
1569387589	Amplitude-only adaptive nulling based on taguchi's method	
	<i>A. Smida, L. Gargouri, R. Ghayoula, H. Trabelsi and A. Gharsallah</i> ..	(Tunisia)
1569387251	Power module for a Wireless and Energy Autonomous Sensor Network	
	<i>X. Zhao, T. Keutel, M. Baldauf and O. Kanoun</i>	(Germany)
1569373867	Accurate closed-form formulas for the electromagnetic parameters of microma- chined shielded membrane microstrip line	
	<i>N. Benahmed, N. Benabdallah, , F. T. Bendimerad, B. Benyoucef and S. Seghier</i> (Algeria)	
1569389613	Efficient 2.45 GHz CPW patch antenna including harmonic rejecting device for wireless power transmission	
	<i>Z. Harouni, L. Osman and A. Gharsallah</i>	(Tunisia)
1569393191	Development of a WSN Integrated Weather Station node for an Irrigation Alert Program under Tunisian Conditions	
	<i>W. Chebbi, M. Benjemaa, A. Kamoun, M. Jabloun and A. Sahli</i>	(Tunisia)

		<u>Thursday, 10h00-10h30</u>
Coffee Break		

		<u>Friday, 10h30-12h20</u>
Closure		



Looking forward to seeing you on SSD'12

March 20-23, 2012

Chemnitz, Germany,

Thank you

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