



Overview

The GRESCOM school on Emergent Wireless and Optical Communication Systems (WIROPT'COM) consists of lectures given by experts in the fields of wireless, optical and power line communication (PLC) systems from both industry and academia. It also includes poster presentations by participating Ph.D. students. The program covers fundamental, advanced and application oriented topics in communications.

This school will provide the attendees a comprehensive overview of emerging technologies and an opportunity to learn about issues affecting various aspects of wireless, optical and PLC systems, and also an opportunity to interact with each other.

The WIROPT'COM school is important for everyone interested in understanding RF circuits and systems design to meet challenging requirements of emergent wireless communication applications and in learning optical and photonic devices characterisation and optical communication systems used in building solutions and architectures for complex ultra-broadband networks, especially for the future Internet. The courses will focus on the latest in transmission channel modelling, transmitter and receiver architectures and circuits highlighting the major design tradeoffs. Other topics such as PLC design will be emphasized as they are essential to the success of hybrid communication networks for Internet of Things (IoT) applications.

The school is intended for graduate students and researchers as well as design engineers, and product managers at industry.

Program

Friday, April 21st, 2017

Time	Friday April 21 st , 2017
08 :30- 09 :00	Registration
09 :00-09 :30	Welcoming and introduction
09 :30-10 :30	Plenary Talk 1 Channel coding techniques for RF/PLC systems, <i>Prof. Han Vinck, Duisburg-Essen University, Germany</i>
10 :30-11 :00	Coffee Break
11 :00-11 :45	Lecture 1 Reliable Wireless Communication Design for IoT Applications <i>Prof. Adel Ghazel, Director of GRESCOM Lab., SUP'COM, University of Carthage, Tunisia</i>
11 :45-12 :30	Lecture 2 Caractérisation d'Intégrité du signal dans les connecteurs haut débit <i>Prof. Fabien Ndagijimana, University-Grenoble-Alpes, IMEP-LAHC, France</i>
12 :30-14 :00	Lunch break
14 :00 -14 :45	Lecture 3 Free space optical communication systems <i>Prof. Habib Fathallah, Faculty of Sciences of Bizerte, University of Carthage, Tunisia</i>
14 :45 -15 :30	Lecture 4 High speed optical communication networks <i>Prof. Mourad Menif, GRESCOM senior researcher, SUP'COM, University of Carthage, Tunisia</i>
15 :30-17 :30	Poster session
20 :00	Gala Dinner

Saturday, April 22nd, 2017

Time	Saturday April 22 nd , 2017
09 :00- 10 :00	Plenary Talk 2 Nonlinear optics in optical fibers <i>Prof. Mário Ferreira, University of Aveiro, Portugal</i>
10 :00-10 :45	Lecture 5 Highly nonlinear fibers for new mid-infrared light sources <i>Dr. Amine Ben Salem, GRESCOM senior researcher, SUP'COM, University of Carthage, Tunisia</i>
10 :45-11 :15	Coffee Break
11 :15-12 :00	Lecture 6 Conception et miniaturisation des antennes RFID <i>Prof. Tân-Phu Vuong, INP-Grenoble, IMEP – LAHC, France</i>
12:00-12 :45	Lecture 7 Conception des circuits RF reconfigurables pour les transceivers SDR <i>Prof. Mohamed Mabrouk, GRESCOM senior researcher, ISET'COM, Tunisia</i>
12 :00-14 :00	Lunch Break
14 :00-20 :00	Social Event

Sunday, April 23rd, 2017

Time	Sunday April 23 rd , 2017
09 :00- 09 :45	Lecture 8 Space Diversity in MIMO Power Line Channels <i>Mr. Babak Nikfar, Duisburg-Essen University, Germany</i>
09 :45-10:30	Lecture 9 Impulsive Noise Characterization and Modelling in Narrow-Band PLC channels <i>Dr. Fatma Rouissi, GRESCOM senior researcher, ENICarthage, University of Carthage, Tunisia</i>
10 :30-11 :00	Coffee Break
11:00-11:45	Lecture 10 LDPC codes: new efficient algorithms for growing challenges <i>Dr. Nadia Khouja, GRESCOM senior researcher, ISET'COM, University of Carthage, Tunisia</i>
11:45-12:30	Lecture 11 Coherent optical light sources <i>Dr. Timmo Van der Beek, Senior researcher, Laboratoire Laser Afrique, Netherlands</i>
12 :30-12 :45	Closing ceremony: certificates & best student awards
12 :45-14 :00	Lunch Break
14:00	Departure

Registration

Attendees to GRESCOM WIROPT'COM school need to confirm their registration by paying the following fees before April 7th, 2017:

- PhD Students : 400 TND
- Academia staff : 550 TND
- Industry staff : 600 TND

These registration fees cover 3 nights in full board hotel in Yasmine Hammamet, scientific documentation, lunches, coffee breaks and Gala Dinner. The Social Event is not included in the registration fees and is considered as an additional charge.

Places are limited and will be awarded in order of registration.

To confirm your registration please complete and send the attached registration form to:

amine.bensalem@supcom.tn

Method of Payment: Bank wire transfer

Account holder: Association des diplômés de SUP'COM (AdSup)

Account number: 04034120002085201890

IBAN: TN59 04034120002085201890

Code BIC: BSTUTNTTINT

Bank: ANGLE DE L'AVENUE FETHI ZOUHEIR ET RUE DE PALESTINE CP 2083 – Ariana

Certificate of Participation and Awards

A certificate of participation will be issued to all the attendees.

Three awards will be attributed to best Ph.D. students works to be presented during the Poster Session.

Organization Committee

General Chair	Amine Ben Salem
Program Co-Chairs	Rim Cherif, Adel Ghazel
Registration	Amal Farhat, HÉla Gassara
Finance	Khaled Grati
Communication	Ons Ben Rhouma, Rim Barrak, Safa Najjar, Abir Hraghi
Logistics	Safa Najjar, Abir Hraghi