Call for Contributions for

POSETE: Pollutants Sensing Techniques for Human Health Damages Estimation

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along with

CENTRIC 2016, The Eighth International Conference on Advances in System Simulation

The Ninth International Conference on Advances in Human-oriented and Personalized Mechanisms, Technologies, and Services

http://www.iaria.org/conferences2016/CENTRIC16.html

August 21 - 25, 2016 - Rome, Italy

Submissions: <u>umbertocera@gmail.com</u>

Important deadlines:

Submission (full paper): July 10, 2016

Acceptance: July 20, 2015 Registration: July 30, 2016 Camera ready: July 30, 2016

Contribution types

Regular papers [in the proceedings, digital library]

Short papers (work in progress) [in the proceedings, digital library]

Posters: two pages [in the proceedings, digital library]
Posters: slide only [slide-deck posted on www.iaria.org]
Presentations: slide only [slide-deck posted on www.iaria.org]

Demos: two pages [posted on www.iaria.org]

Paper Format

http://www.iaria.org/conferences2016/CfPCENTRIC16.html

Before submission, please check and comply with the editorial rules:

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Publications

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Registration

Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

Registration fees are available at http://www.iaria.org/registration.html

Content

Aims and scope of this special session:

Since we are more and more surrounded by harmful chemical toxins, electromagnetic waves, nuclear radiations, etc. there is an urgent necessity to diminish our exposure to such dangerous pollutants. Our exposure to household chemicals such as organic solvents from paint, cleaners, air fresheners, insect repellents, etc., or to pesticides, insecticide and other contaminants in the food and water is exponentially increasing. Alarming threatens also arise from our daily exposure to electromagnetic waves including cellphones or city cell sites, water radioactive contamination from nuclear plank leakages or soil radon. Pollutants menacing our health are nowadays closely surrounding us albeit still very insufficiently underestimated. Precisely measuring an average person exposure to certain pollutants may require innovative sensors. New developments on bio-sensors or chemical sensors will clearly extend the detection area when coupled with standard detection methods. Advances in remote sensing solutions such as photometers, used to detect the emission spectra of various chemicals, adapted to household chemicals pollutants detection, may deeply contribute to quantifying close pollutants exposure. Furthermore more affordable quality sensors are becoming increasingly available to the market, favoring their direct adaptation to pollutants detection. Therefore this increased amount of measurement data render interpretation complex, requiring models creation to provide reliable estimations. Precisely estimating the total quantity of pollutants exposure still remains challenging, requiring small grain temporal and spatial resolution data and models of toxins flux.

Innovative measures to help monitoring everyday pollutants exposure of various kind, especially if non invasive and embedded in portable devices are specifically encouraged. Cell phone based applications coupled with specific embedded sensors may allow users to consult their individual exposure to various toxins in near real time. This information is of capital importance helping users to modify their daily routines accordingly. Besides collection of multi-user data may permit to create pollutants concentration maps, favoring correlation findings between pollutant type and disease type. At last but not least, all the innovations limiting pollutants dissemination in the environment and subsequent home human exposure, including any innovative devices or technology solutions involved in various industrial processes will have a central place in this special session.

The topic suggested by the track can be discussed in term of concepts, state of the art, research, standards, implementations, running experiments, applications, and industrial case studies. Authors are invited to submit complete unpublished papers, which are not under review in any other conference or journal in the following, but not limited to, topic areas.

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