





AComIn: Advanced Computing for Innovation

FP7 Capacity Programme, Research Potential of Convergence Regions.

WORKSHOP

Information and Communication Technologies for Human Health and Quality of Life (ICT-HuHeQuL)

May 15-17, 2013, Stara Zagora Mineral Baths, ARMIRA Hotel

Partially supported by the AComIn project (Advanced Computing for Innovation)

Program Committee:

Chair: Prof. Dr. Dimitar Karastoyanov Members: Acad. Vassil Sgurev Prof. Dr. Sc. Svetozar Margenov Prof. Dr. Sc. Galia Angelova Prof. Dr. Sc. Ivan Dimov

Prof. Dr. Sc. Ivan Yatchev

Prof. Dr. Kostadin Kostadinov Prof. Dr. **Todor Neshkov**

Prof. Dr. Dimitar Tcharaktchiev

Topics:

- ICT for Human Health
- ICT for Quality of Life
- ICT in Medical Robotics
- ICT for Healthful Food

Scientifical Program:

May 15, 2013, 14.00 - 15.00 -Registration

May 15, 2013, 15.00 - 15.15 -**Opening Ceremony**

May 15, 2013, 15.15 - 17.15 -

Welcoming Speech from the Director of IICT-BAS

Welcoming Speech from FSTU, SAI, BRS

Welcoming Speech from the Mayor of St. Zagora City Welcoming Speech from the District Health Inspection Welcoming Speech from the District Health Insurance Welcoming Speech from the Leader of AComIn Project

Plenary Lecture: Supercomputing Applications

In Life Sciences

Plenary Lecture: AComIn Objectives

May 15, 2013, 17.15 - 17.30 - Coffee Break

Prof. Dr.Sc. Svetozar Margenov

Acad. Vasil Sgurev

Dpt Mayor Ivanka Sotirova Director Zlatina Naneva

Director Slavka Yordanova

Prof. Dr.Sc. Galia Angelova Prof. Dr.Sc. Svetozar Margenov

Prof. Dr. Sc. Galia Angelova

May 15, 2013, 17.15 - 17.30 Company Business Presentation Presentation of SPESIMA GMBH

May 15, 2013, 19.00 - 22.00 -Welcoming Dinner May 16, 2013, **Session ICT for Human Health** 09.00 - 10.15 -Chair Prof. Dr. D. Karastovanov 1. Stefka Fidanova, Protein Stucture Simulation 2. Olympia Roeva, Stefka Fidanova, Modeling E.coli Cultivation Process 3. Gergana Bencheva, Computer modelling of cerebral aneurysm hemodynamics 4. Kostadin Kostadinov, Nano Robotics for In Vitro Procedures 5. Antonia Todorova, ICT for Human Health and Quality of Life in Stara Zagora Municipality 6. Stanislav Simeonov, Assitive Computer Interface for Visually Impaired May 16, 2013, 11.45 - 12.15 -Presentation of the Cluster "Mechatronics and Automation" May 16, 2013, 10.15 - 10.30 -Coffee Break May 16, 2013, 10.30 - 11.45 -**Session ICT in Medical Robotics** Chair Assoc. Prof. Gennady Agre Ph.D 1. K.Georgiev, S.Margenov: Computer modelling and simulations of processes involved in radio-frequency hepatic tumor ablation 2. Nedko Shivarov, Robot SHADOW for seniors 3. Dimitar Karastoyanov, V.Monov, New Methods and Means for Knee and Ankle Rehabilotation 4. Svetla Karastoyanova, National Programs for Human Health and Quality of Life 5. N. Stoymenov, Graphical representation of information for visually impaired people 6. Dimitar Tcharaktchiev, Galia Angelova, Automatic extraction of patient-related facts from the free texts of electronic health records 11.45 - 12.15 Company Business Presentations "ADDISS LAB" May 16, 2013, May 16, 2013, 14.00 - 15.15 -**Session ICT for Quality of Life** Chair Prof. Dr. Sc. Galia Angelova 1. Tony Boyadjiev, Automated Bone Drilling in Orthopedic Surgery 2. Ivan Yatchev, Krastio Hinov, Dimitar Karastoyanov, Permanent Magnet Linear Actuator for Braille Screen 3. T.Atanasova, A. Bakanov, Smart living environment and the subjective quality of life 4. T. Tashev, A. Bakanov, Study filtration properties of soils 5. St. Gyoshev, Protection environment through new methods of renovation details May 16, 2013, 16.45 - 17.15 -Company Business Presentations (incl. posters, demos) May 16, 2013, 15.15 - 15.30 -Coffee Break Session ICT for Healthful Food May 16, 2013, 15.30 - 16.45 -Chair Assoc. Prof. Krasimir Dimov Ph.D 1. Iliana Nacheva, Maria Doneva, Yancho Todorov, Petia Metodieva, Daniela Miteva, Krasimir Dimov, ICT on Innovative technologies for creation of probiotic foods 2. Maria Doneva, Iliana Nacheva, Petia Metodieva, Yancho Todorov, Daniela Miteva, ICT on Application of cryobiotechnologies for development of lyophilized poly enzyme complexes 3. Daniela Miteva, Krasimir Dimov, Iliana Nacheva, Yancho Todorov, Maria Doneva, Petia Metodieva, ICT on Prolongation of the storage and quality preservation of potato semifinished foods by specific technological treatment 4. Daniela Miteva, Krasimir Dimov, Iliana Nacheva, Yancho Todorov, Maria Doneva, Petia Metodieva, ICT on Modern technological processing for ensuring the quality of fruits 5. V.Monov, Dimitar Karastoyanov, ICT for Energy efficiency of harmful industries May 16, 2013, 17.15 - 17.30 -**Closing Ceremony** May 16, 2013, 19.00 - 22.00 -**Closing Dinner**