

## PROGRAM

of the International Conference  
“Robotics & Mechatronics and Social Implementations”  
28.08. – 01.09.2018

Place of the Conference:

**Interhotel “Cherno More”, Varna, Bulgaria**

With Financial Support of:

**EU Funded Project H2020-MSCA-RISE-2017 No 777720 CybSPEED**

### **28.08. 2018**

After 14,00 h. Registration of the Participations & Accommodation at the Hotel “Cherno More”, Varna, Bulgaria.

### **29.08.2018**

**08.00 h. - 09.30 h. Breakfast**

**10.00 h. - OFFICIAL OPENING OF THE CONFERENCE**

**10.45 h. – 12.00 h. 1<sup>ST</sup> SCIENTIFIC SESSION**

10.45 h. – 11.15 h. Presentation of 1-st Keynote Speaker:

**Prof. Manuel GRAÑA**, Prof. Dept. CCIA, UPV/EHU, San Sebastian, Spain,  
Coordinator of the Project CybSPEED.

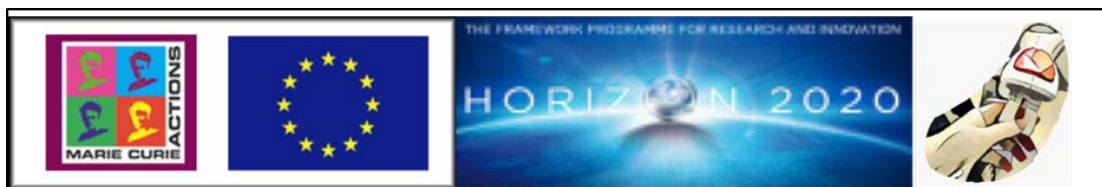
**“ON THE PROPOSED CYBSPEED PROJECT EXPERIMENTAL  
RESEARCH PROTOCOLS”**

11.15 h. – 11.30 h. Coffee Break

11.30 h. – 12.00 h. **Maya DIMITROVA, Hiroaki WAGATSUMA, Vassilis  
KABURLASOS, Aleksandar KRASDEV, Ivan KOLEV,**

**“TOWARDS SOCIAL COGNITIVE NEUROPSYCHOLOGY ACCOUNT OF  
HUMAN-ROBOT INTERACTION”**

**12.00 h. – 14.00 h. Lunch Break**



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**15.00 h. – 17.00 h. II SCIENTIFIC SESSION**

15.00 h. – 15.30 h. Presentation of 2-nd Keynote Speaker:  
**Luba ALBOUL- ‘SHARING SPACES WITH ROBOTS’**

**15.30 h. – 15.45 h. Coffee Break.**

15.45 h. – 16.00 h.

**Alicia D’ANJOU, Manuel GRAÑA, Francois MOUTET ,  
”APPROACHES TO COMPUTER AIDED DIAGNOSIS OF AUTISM  
SPECTRUM DISORDER”**

16.00 h. – 16.15 h.

**Eleni VROCHIDOU, Michail MANIOS, Vassilis G. KABURLASOS, Fotis  
PANAGIOTOPOULOS, Charalabos AITSIDIS, Vasilis FERELIS,  
“DESIGN OF SOCIAL ROBOTS USING OPEN-SOURCE ROBOTIC  
PLATFORMS”**

16.15 h. – 16.30 h.

**Snezhana KOSTOVA,  
" SOME ASPECTS OF MODELING CPS FOR PEDAGOGICAL  
REHABILITATION IN SPECIAL EDUCATION"**

16.30 h. – 16.45 h.

**Lefteris MOUSIADES, Chairi KIOURT, Stergios PAPANIMITRIOU,  
“TOWARDS A ROBOT ASSISTANT IN VOCABULARY LEARNING”**

**19.00 h. “Welcome” Party**

**30.08. 2018**

**08.00 h. - 09.30 h. Breakfast**

**10.00 h. – 12.00 h. III SCIENTIFIC SESSION**

10.00 h. – 10.30 h. Presentation of 3-rd Keynote Speaker:

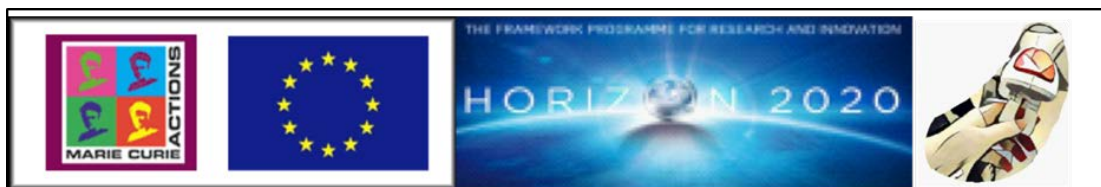
**Prof. D-r Rosica RAIKOVA, Institute of Biophysics and Biomedical  
Engineering – BAS.**

**“MODELING AND SIMULATING MOTOR ACTIVITY AT MUSCLE AND  
MUSCLE MOTOR UNITS”**

**10.30 h. – 10.45 h. Coffee Break.**

10.45 h. – 11.00 h.

**Evgeniya GOSPODINOVA, Mitko GOSPODINOV, “SOFTWARE FOR  
AUTOMATED COMPUTER-BASED DIAGNOSTIC SYSTEM”**



11.00 h. – 11.15 h.

**Mitko GOSPODINOV, Evgeniya GOSPODINOVA, Galya GEORGIEVA-TSANEVA, Krasimir CHESHMEDZHIEV,  
“PORTABLE PHOTOPLETHYSMOGRAPHY-BASED DEVICE FOR  
COMPUTER DIAGNOSTICS”**

11.15 h. – 11.30 h.

**Alexander SHAMLIEV, “SOARING FLIGHT TRAJECTORY OPTIMIZATION  
IN CONVECTIVE THERMALS”**

11.30 h. – 11.45 h.

**Blagovest HRISTOV, “METHODS FOR CONTROLLING BRUSHLESS DC  
ELECTRIC MOTOR (BLDC) APPLICABLE IN ROBOTICS”**

10.45 h. – 12.00 h.

**Vasil TRENEV, Nina ROBSON, Emil PETROV , “VEHICLE AND ROBOT  
APPLICATIONS SPECIFIC DEVELOPMENT SYSTEM FOR HYBRID  
ENERGY STORAGES WITH NOVEL ELECTROCHEMICAL  
COMPONENTS”**

**12.00 h. – 14.00 h. Lunch Break**

**15.00 h. – 17.00 h. IV SCIENTIFIC SESSION.**

15.00 h. – 15.30 h. Presentation of 4-th Keynote Speaker:

**Prof. D-r Roman Zahariev, Institute of Robotics - BAS, Dpt. Director.  
“Development of Robotics, Service Robots and Results of IR-BAS”**

**15.30 h. – 15.45 h. Coffee Break**

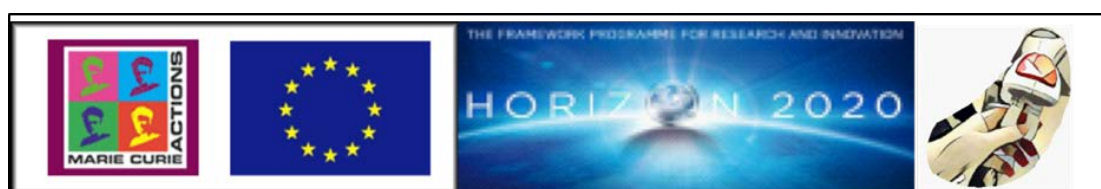
15.45 h. – 16.00 h.

**Yasen PAUNSKI, Georgi ANGELOV, Roman ZAHARIEV, Nina  
VALCHKOVA, “EMBEDDED LITHIUM-ION BATTERY MANAGEMENT AND  
HARGING SOLUTONS FOR MOBILE SERVICE ROBOTS”**

16.00 h. – 16.15 h.

**Georgi ANGELOV, Yasen PAUNSKI, Roman ZAHARIEV, Nina  
VALCHKOVA, “DESIGNING A WEB BASED SOFTWARE CONTROL  
SYSTEM FOR SERVICE ROBOT AND SEQUENCE PROGRAMMING  
USING SCRIPTING LANGUAGE EDITOR”**

16.15 h. – 16.30 h.



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**Roman ZAHARIEV, Nina VALCHKOVA, Georgi ANGELOV, Yassen PAUNSKI “SERVICE MOBILE ROBOTS FOR HELP OF DISABLED PEOPLE”**

16.39 h. – 16.45 h.

**Emil PETROV, Vasil TRENEV, “USING DIRECT HMI SIMULATOR AS A REMOTE OPERATOR PANEL”**

16.45 h. – 17.00 h.

**Plamen RAYKOV,  
“INVESTIGATION OF A NON-BLADE TURBINE”**

**31.08. 2018**

**08.00 h. - 09.30 h. Breakfast.**

**10.00 h. – 12.00 h. Visit of Observatory and “Planetarium” in town Varna**

**10.00 h. – 12.00 h. SCIENTIFIC POSTERS SESSION**

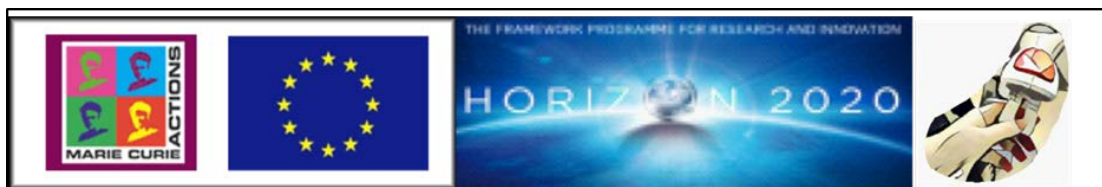
**Posters:**

- 1. Dimcho TCHAKARSKY, Tatyana VAKARELSKA, Reni DIMITTOROVA, Pancho TOMOV, “EFFECTIVE SOLUTIONS FOR AUTOMATION AND ROBOTIZATION OF MANUFACTURE”**
- 2. Veronika IVANOVA, Dichko BACHVAROV, Ani BONEVA, “SMART SURGICAL INSTRUMENTS FOR ROBOTS”**
- 3. Ivanka PEEVA, Chavdar KOSTADINOV,**
- 4. “ABOUT THE POSSIBILITY OF INSPECTING GAS PIPELINES”**
- 5. Ivan CHAVDAROV, Pancho DACHKINOV, Georgi ELENICHEV, Radoslav ILIEV, Ivelin STOYANOV, Stefani MINCHEVA, Aleksandar KRASDEV, “3D PRINTED HUMANOID HAND”**

**12.00 h. – 12.30 h. Official Closing of the Conference**

**15.00 h. – Discussion about “Robotics & Mechatronics and Social Implementations”**

**01.09. 2018**



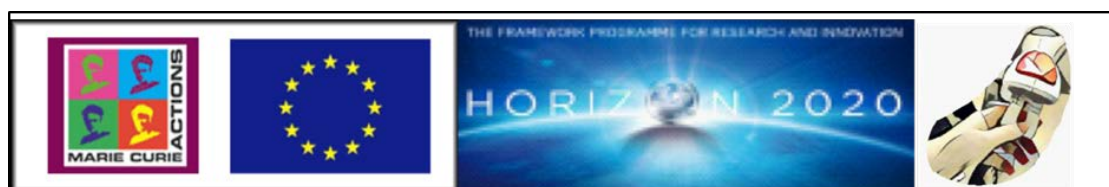
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Before 12.00. h. Living of the Participations from the Hotel



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