UNIVERSITY – INDUSTRY COLLABORATION: A NEW MILESTONE

Date: 27 October 2015
Location: Arezzo, Italy,
Via AchilleGrandi nc.10/12, 52100

Co-organizers: ITMO University
Diakont Group of Companies:
With the support of the Tuscany Region government.

Moderator: Dr. Debra Stewart, President Emerita and Senior Scholar, Council of Graduate Schools

Seminar Goals:
• Organize and connect industrial leaders and universities that have the highest levels of experience and competence in the specialties required for the creation of effective high-tech production centers, for the purpose of achieving synergies that result in scientific and commercial progress
• Enable collaborative research for the creation of high-tech production centers, based on the existing project for creation of mass production of advanced electromechanical actuators
• Enable collaborative research for the creation of the base product lines of devices for production automation and further efficiency enhancements, facilitating the return of industrial enterprises to developed countries with traditionally high labor costs
• Development and implementation of measures to provide associated investment support, including preparation of high quality supporting material required to obtain grants
• Enable the creation of high-tech enterprises that provide high-margin production of globally competitive products, the expansion of the social group of knowledgeable industry workers at the first stage of high-tech mass production, and then in the subsequent stages the R&D business structure – using the Tuscany region as the pilot model
• Analysis of the results of the pilot project, and preparation of proposals for possible replication of the experience to regions with underdeveloped or now-developing infrastructure, for the organization of high-tech production centers

Prospective Topics for Collaborative University-Industry Research:
• Construction, technical, and managerial solutions required to create energy-efficient, environmentally-friendly, highly-productive, flexible high-tech industrial enterprises with a high level of automation and technologies
• Prospects for the development of the products required as the components for next-generation collaborative industrial robots, as well as for medical devices and simulators, based on the latest research results
• Aspects of social adaptation, urbanization, infrastructure development, and economical growth of the regions where high-tech production zones are organized
• Selection criteria for regions to position the high-tech production centers
Participants list:

Prof. Vladimir Vasileyev  
Rector, ITMO University

Prof. Xi-Chang Zhang  
Director of the Institute of Optics and M. Parker Givens Professor, Rochester Institute of Technology

Prof. Debra Stewart  
President Emerita and Senior Scholar, Council of Graduate Schools

Prof. Paul Urbach  
President, European Optical Society, Delft University of Technology

Alkis Lembesis  
Founder and CA, Hellenic Institute of Holography

Prof. Stephen Hagen  
Advisor to rector, ITMO University

Dr. Daria Kozlova  
Vice-rector for International Relations, ITMO University

Dr. Marianna Chistyakova  
Head of Strategic Development Department, ITMO University

Ekaterina Mikhailova  
Head of Strategic Planning and Ranking Research Department, ITMO University

Nina Yanikyna  
Head of Project and Innovative Activities Department, ITMO University

Prof. Yuri Kolesnikov  
Vice-rector for Educational and Administrative activities, ITMO University

Maria Sigutina  
Head of Brussels office, ITMO University

Sergio Porcellotti  
Vice-President, Diakont SRL

Mikhail Fedosovsky  
President, Diakont SRL

Head of STTS Department, ITMO University

Mikhail Uvarov  
Head of Analytics Group, Diakont

Adjunct Faculty, ITMO University

Edward Petit de Mange  
Managing Director and CEO, Diakont Advanced Technologies

Mikhail Lyssy  
EMA Sales Director, Diakont

Dr. Juho Miiakio  
Professor, Hochschule of Emden-Leer

Dr. Armando Walter  
Professor, Hochschule of Emden-Leer

Colombo

Dr. Gianni Campatelli  
Professor, Universitadeglistudii di Firenze

Dr. Calogero Maria Oddo  
Assistant Professor, Head of the Human Machine Nexus Laboratory, The BioRobotics Institute of ScuolaSuperioreSant'Anna, Pisa, Italy

Dr. Roberto Pini  
Director, Institute of Applied Physics – CNR

Coordinator, Regional Innovation Pole for Optoelectronics and Space

Dr. Marco Mariani  
IRPET – Tuscany’s Regional Institute for Economic Planning

Dr. Filippo Giabbani  
Representative of Tuscany Region

Dr. Satyandra Gupta  
Professor, University of Maryland

Director, Maryland Robotics Center

Ing. Alessandro Ghinelli  
Mayor of Arezzo

Robert Casini  
Mayor of Lucignano

Giuseppe de Filippis  
Director – Resp. Corporate Area Territoriale, Banca Monte deiPaschi di Siena

Dr. Roberto Casini  
Mayor of Lucignano

Dr. Larry Sweet  
Professor, Georgia Tech

Luca Bernardini / Mauro Panoni  
Representative, Baraclit

Claudio Casi / Stefano Masini  
Representative, Studio Pentium

Gianni Guidotti  
Representative, Eurosecurezza
**Seminar program:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>09:30</td>
<td>Hotel to Seminar transfers</td>
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<tr>
<td>10:00</td>
<td>OPENING REMARKS: Start of the seminar</td>
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<tr>
<td>10:05</td>
<td><strong>PART 1: University-Industry Collaboration</strong></td>
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<tr>
<td>10:05</td>
<td>Introduction, and a Case Study in the State-of-the-Art of U-I Collaboration: Centennial campus at North Carolina State University case. <em>Prof. Debra Stewart</em></td>
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<tr>
<td>10:20</td>
<td>The Institute of Optics: A Jewel in the Crown. <em>Prof. Xi-Chang Zhang</em></td>
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<tr>
<td>10:35</td>
<td>The involvement of TUDelft in starting new enterprises. <em>Prof. Dr. Paul Urbach</em></td>
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<tr>
<td>10:50</td>
<td>ITMO University and Diakont collaboration experience in creation of the competitive product. <em>Prof. Yuri Kolesnikov</em></td>
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<tr>
<td>11:10</td>
<td>Diakont-Hochschule Emden-Leer case. <em>Dr. Juho Miakiio / Dr. Armando Walter Colombo</em></td>
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<tr>
<td>11:20</td>
<td>Panel discussion: Similarities and Differences between the Cases, Positive Effects for the Parties. Future Collaboration. <em>Moderator: Prof. Dr. Debra Stewart</em></td>
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<td>11:50</td>
<td>Coffee break</td>
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<tr>
<td>12:00</td>
<td>A point of view for the U-I collaboration in Tuscany. <em>Dr. Marco Mariani</em></td>
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<tr>
<td>12:15</td>
<td>Overview of Tuscany Research and Industrial Activities in the Fields of Optics and Photonics. <em>Dr. Roberto Pini</em></td>
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<tr>
<td>12:25</td>
<td>Panel discussion of the U-I collaboration and its effect to the Region. <em>Moderator: Prof. Dr. Debra Stewart</em></td>
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<td>12:45</td>
<td>Facilities tour</td>
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<td>13:00</td>
<td>Transfer for a lunch</td>
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<tr>
<td>13:15-14:45</td>
<td>Lunch at the traditional Tuscany restaurant</td>
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<tr>
<td>14:45</td>
<td>Transfer back to the seminar site</td>
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<tr>
<td>15:00</td>
<td><strong>PART 2: Development of High-tech Enterprises as a Tool for Economic Growth</strong></td>
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<tr>
<td>15:00</td>
<td>Implementation of the new approach for high-efficient environmental friendly production at the base of the project of EMA and gears mass production facilities in Lucignano. <em>Mikhail Uvarov</em></td>
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<tr>
<td>15:45</td>
<td>Panel discussion: U-I collaboration on the Research Topics within the Presented Project. <em>Moderator: Mikhail Uvarov, Prof. Dr. Debra Stewart</em></td>
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<td>16:10</td>
<td><strong>PART 3: Collaborative Robotics in Industrial and Medical Applications</strong></td>
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<tr>
<td>16:10</td>
<td>Introduction, <em>Edward Petit de Mange</em></td>
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<tr>
<td>16:15</td>
<td>Bringing Collaborative Robots with Enhanced Perception and Learning to the Manufacturing Floor, <em>Dr. Larry Sweet</em></td>
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<td>16:35</td>
<td>RoboSAM Project, <em>Dr. Satyandra Gupta (via videoconference)</em></td>
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<td>17:00</td>
<td>Coffee-break</td>
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<td>17:10</td>
<td>Research activities of The BioRobotics Institute of ScuolaSuperioreSant’Anna, Pisa, <em>Dr. Calogero Maria Oddo</em></td>
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<td>17:25</td>
<td>Diakont Group Development Roadmap for Industrial and Medical Robotics, <em>Edward Petit de Mange</em></td>
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<td>17:40</td>
<td>Panel discussion: U-I collaboration over the topics of researches within the presented concept of the development, <em>Moderator: Edward Petit de Mange, Prof. Dr. Debra Stewart</em></td>
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<tr>
<td>18:00</td>
<td><strong>CLOSING REMARKS: Possibilities, Prospects, and Approaches to Collaboration on the Presented topics, and Q&amp;A, Moderators:Mikhail Uvarov, Sergio Porcellotti, Edward Petit de Mange, Prof. Dr. Debra Stewart</strong></td>
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<tr>
<td>18:30</td>
<td>Seminar site to hotel transfers</td>
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<tr>
<td>20:00</td>
<td>Meeting in the center of Arezzo, dinner at Loggia Vasari restaurant</td>
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*Some shifts to the program may be made in the event of changes*