

# Chemistry meets **I**ndustry and **S**ociety

*A creative showcase conference*

*Organized by*



Società Chimica Italiana

*Grand Hotel Salerno*  
*August 28<sup>th</sup>-30<sup>th</sup> 2019, Salerno IT*

## Scientific Program

*In collaboration with*

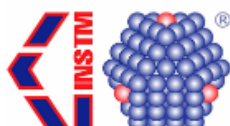


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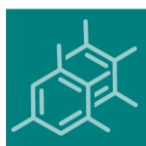
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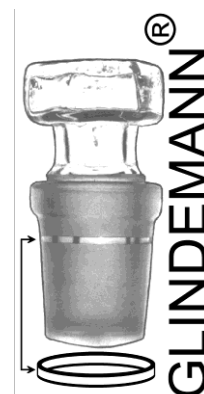


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## SCHEMATIC PROGRAM

<b>Wednesday, August 28<sup>th</sup></b>		
9:30	13:00	<i>Registration Desk open</i>
15:00	17:30	
<b>General Plenary Session</b>		
11:00	13:00	<b>General Introductory Session</b> (in Italian & Open to public)  <b>Tavola Rotonda – Round Table</b> <i>Nessun futuro senza chimica</i> <i>Creare una sinergia positiva tra chimica, società ed industria</i>
13:00	15:00	<i>Break and Poster view</i>
15:00	15:15	<b>Conference Opening</b>
15:15	17:30	<b>Plenary Session</b> <i>Chemistry meets Industry and Society</i>
17:30	19:45	<b>Poster and Brokerage Session</b>
20:15	22:30	<i>Welcome Reception</i>

<b>Thursday, August 29<sup>th</sup></b>						
8:30	13:00	<i>Registration Desk open</i>				
15:00	17:30					
<b>Workshop Sessions</b>						
9:00	11:00	<a href="#"><u>WS1</u></a>	<a href="#"><u>WS2</u></a>	<a href="#"><u>WS4</u></a>	<a href="#"><u>WS5</u></a>	<a href="#"><u>WS7</u></a>
11:00	11:30	<i>coffee break</i>				
11:30	13:00	<b>WS1</b>	<b>WS2</b>	<b>WS4</b>	<b>WS5</b>	<b>WS7</b>
13:00	15:00	<i>Break and Poster view</i>				
15:00	17:30	<b>WS1</b>	<b>WS2</b>	<b>WS4</b>	<b>WS5</b>	<b>WS7</b>
17:30	19:00	<b>Poster session: WS1, WS2, WS4, WS5, WS7</b>				
20:00	22:30	<i>Conference Dinner</i>				

<b>Friday, August 30<sup>th</sup></b>					
8:30	15:00	<i>Registration Desk open</i>			
<b>Workshop Sessions</b>					
9:00	11:00	<b>WS1</b>	<a href="#"><u>WS3</u></a>	<a href="#"><u>WS6</u></a>	<a href="#"><u>WS8</u></a>
11:00	11:30	<i>coffee break</i>			
11:30	13:00	<b>WS1</b>	<b>WS3</b>	<b>WS6</b>	<b>WS8</b>
13:00	15:00	<i>Break and Poster view</i>			
15:00	17:30	<b>WS1</b>	<b>WS3</b>	<b>WS6</b>	<b>WS8</b>
17:30	19:00	<b>Poster session: WS3, WS6, WS8</b>			

Poster panels (1 m large x 2 m high) are available and are labeled with the abstract reference number indicated in the program. Posters (suggested size 70x100 cm) need to be exposed in the morning and removed at the end of poster session.

## ORGANIZATION

### Scientific Committee

- Angela Agostiano - Chairperson, President Società Chimica Italiana, University of Bari
- David Cole-Hamilton, vice-President Euchems, University of St Andrews
- Giorgio Cevasco, vice-President Società Chimica Italiana, University of Genova
- Francesco Salvo, Consigliere Federazione Nazionale degli Ordini dei Chimici e dei Fisici
- Gaetano Guerra, vice-President Società Chimica Italiana, University of Salerno
- Raffaele Riccio, past-President Società Chimica Italiana, University of Salerno
- Michele Laus, President of AIM, University East Piemonte
- Andrea Caneschi, Director of INSTM, University of Firenze

### Organizing Committee

- Gabriele Centi, Chairperson, University of Messina
- Aram Manoukian, Presidential Council of Federchimica
- Vittorio Maglia, Federchimica Economic Analysis and Internationalisation
- Elisabetta Pozzetti, Farindustria, Direzione Tecnico Scientifica
- Matteo Guidotti, WS1 Delegate, CNR-ISTM
- Oreste Piccolo, WS2 Delegate, Green Chemistry Group SCI
- Mariano Venanzi, WS3 Delegate, University of Roma “Tor Vergata”
- Margherita Venturi, WS4 Delegate, University of Bologna
- Martino Di Serio, WS5 Delegate, University of Napoli “Federico II”
- Maurizio Galimberti, WS6 Delegate, Polytechnic of Milano
- Daniele Caretti, WS7 Delegate, University of Bologna
- Luigi De Nardo, WS8 Delegate, Polytechnic of Milano

### Local Organizing Committee

- WS1 Chemistry for Secure Society: Vincenzo Vaiano, University of Salerno
- WS2 Chemistry meets Bioeconomy: Carmine Capacchione, University of Salerno
- WS3 Smart Peptide Chemistry: Anna Maria D’Ursi, University of Salerno
- WS4 Chemistry meets light: Andrea Peluso, University of Salerno
- WS5 Sustainability of products: Antonio Proto, University of Salerno
- WS6 Sustainability and mobility: Adriano Intiso, University of Salerno
- WS7 Plastics & Environment: Paola Rizzo, University of Salerno
- WS8 Smart Materials: Vincenzo Venditto, University of Salerno

### Secretariat

- Barbara Spadoni, Società Chimica Italiana
- Dania Della Giovanna, Federchimica
- Aniello Vittore, University of Salerno

### Webmaster

- ZON Service sas - [zonservice@unisa.it](mailto:zonservice@unisa.it)
- Gianni Morelli, Società Chimica Italiana - [webmaster@soc.chim.it](mailto:webmaster@soc.chim.it)

## GENERAL SESSION

*The Società Chimica Italiana (SCI) promotes the study and advancement of Chemistry and of its applications in the framework of the progress and well-being of humanity*  
<http://www.soc.chim.it/>

**CIS 2019** aims to be a new breakthrough-type international conference aimed to fill an existing gap between the scientific capabilities of research, and industry and society needs, e.g. from idea to innovation. It aims to be a creative showcase conference, with presentations (from projects, scientists, companies, public agencies, etc.) oriented to present:

- applicable research results (rather than just scientific aspects) in a form where communication to companies and non-experts should be pursued
- specific requests from companies regarding both fundamental and applied aspects that they identify as background for innovation
- strategic aspects of research identified by public agencies to foster competitiveness in the area of chemistry and address societal grand challenges.

**CIS 2019** wants to show the strategic role of Chemistry to foster progress and innovation, with reference to broad topics such as Energy, Health, Sustainability and Security, Everyday life.

The conference is organized in 3 days (August 28<sup>th</sup>-30<sup>th</sup> 2019), with the following format:

### *August 28<sup>th</sup>*

- A public-open morning (in Italian), dedicated to a Round Table discussing the role and opportunities for chemistry to have a stronger role in addressing societal challenges in a closer interaction with industry;
- An afternoon plenary lecture session introducing relevant challenges;
- A poster and brokerage event where companies, start-up, researchers, investors and stakeholders can meet to explore new opportunities of collaboration and partnership;

### *August 29<sup>th</sup> – 30<sup>th</sup>*

- Two full days organized in eight thematic parallel workshops (max 5 parallel sessions per day), with invited & keynote lectures, oral communications and poster presentations.

### Social events

*August 28<sup>th</sup>*: Welcome Reception

*August 29<sup>th</sup>*: Conference Dinner

## Tavola Rotonda – Round Table

### Nessun futuro senza chimica Creare una sinergia positiva tra chimica, società ed industria

#### Coordina



**Pietro Greco**

Giornalista scientifico e scrittore, laureato in chimica, è socio fondatore della Fondazione IDIS-Città della Scienza di Napoli; membro del consiglio scientifico dell'Istituto superiore per la protezione e la ricerca ambientale (ISPRA); membro del consiglio scientifico della Fondazione Symbola; direttore della rivista *Scienza&Società* edita dal Centro Pristem dell'università Bocconi di Milano; condirettore del web journal *Scienzainrete* edito dal Gruppo 2003

(<https://www.scienzainrete.it/>).

#### Interventi di:

- **Angela Agostiano** - Presidente della Società Chimica Italiana (SCI)
- **Nausicaa Orlandi** - Presidente della Federazione Nazionale degli Ordini dei Chimici e dei Fisici
- **Luigi Mansi** - Consiglio di Presidenza di Federchimica
- **Antonio Messina** - Vicepresidente Farminindustria
- **Vincenzo Balzani** - Accademico dei Lincei, professore emerito dell'Università di Bologna
- **Ferruccio Trifirò** - Direttore de *La Chimica e l'Industria*, professore emerito dell'Università di Bologna.

## Plenary Lectures



**Kohzo Ito**

Graduate School of Frontier Sciences, The University of Tokyo

**GEN PL01** – “*Slide-Ring Materials: Novel Tough Polymers for Automobile*”



**Anthony J. Ryan**

The Grantham Centre for Sustainable Futures and the Department of Chemistry, The University of Sheffield, United Kingdom

**GEN PL02** – “*What does sustainable mean in the context of chemistry?*”



**Robert Schlögl**

Max Planck Institute for Chemical Energy Conversion, Mülheim a.d. Ruhr & Fritz-Haber-Institute of Max-Planck-Institute, Berlin

**GEN PL03** – “*Circular Economy of Carbon*”

Wednesday, August 28<sup>th</sup>

<i>Centro Congressi Grand Hotel Salerno</i>	
9:30-13:00	<i>Registration Desk open</i>
13:00-17:30	
<i>Auditorium</i>	
11:00-13:00	<p><b>General Introductory Session (in Italian)</b> Open to public</p> <p><b>Tavola Rotonda – Round Table</b> <b>Nessun futuro senza chimica</b> <b>Creare una sinergia positiva tra chimica, società ed industria</b></p> <p>coordinata dal <b>Dott. Pietro Greco</b> Giornalista scientifico e scrittore</p> <p>Interverranno: <b>Angela Agostiano</b> Presidente della Società Chimica Italiana (SCI)</p> <p><b>Nausicaa Orlandi</b> Presidente della Federazione Nazionale degli Ordini dei Chimici e dei Fisici</p> <p><b>Luigi Mansi</b> Consiglio di Presidenza di Federchimica</p> <p><b>Antonio Messina</b> Vicepresidente Farminindustria</p> <p><b>Vincenzo Balzani</b> Accademico dei Lincei, professore emerito dell'Università di Bologna</p> <p><b>Ferruccio Trifirò</b> Direttore de <i>La Chimica e l'Industria</i>, professore emerito dell'Università di Bologna.</p>
13:00-15:00	<i>Break and Poster view</i>
<p><b>Plenary Session</b> <b>Chemistry meets Industry and Society</b></p>	
<i>Auditorium</i>	
15:00-15:15	<p><b>Conference Opening</b></p> <p><b>Pilar Goya Laza</b> President EuChemS</p> <p><b>Angela Agostiano</b> President Società Chimica Italiana (SCI)</p>
<i>Chairperson: Gabriele Centi, Gaetano Guerra, Raffaele Riccio</i>	
15:15-16:00	<i>GEN PL01 – Kohzo Ito (Graduate School of Frontier Sciences, The University of Tokyo)</i> <i>“Slide-Ring Materials: Novel Tough Polymers for Automobile”</i>
16:00-16:45	<i>GEN PL02 – Anthony J Ryan (The Grantham Centre for Sustainable Futures and the Department of Chemistry, The University of Sheffield, UK)</i>



	<i>“What does sustainable mean in the context of chemistry?”</i>
16:45-17:30	<i>GEN PL03 – Robert Schlögl (Max Planck Institute for Chemical Energy Conversion, Mülheim a.d. Ruhr &amp; Fritz-Haber-Institute of Max-Planck-Institute, Berlin) “Circular Economy of Carbon”</i>

### **Poster and Brokerage Session**

*Introduction by Chairperson: Martino Di Serio*

17.30-17:55	<ul style="list-style-type: none"> <li>• <b>BE IL01</b> - Luigi Nicolais, Caterina Meglio, Maria Emilia Mercurio, Aniello Cammarano <i>“Materias: a model for developing innovative science-based technologies”</i></li> </ul>
17:55-18:45	<p><b>Short Oral</b> presentation of selected contributions (5 min max. each, 3-4 slides with key messages, no questions; contributors are invited to display a poster or rollup in the following poster session)</p> <ul style="list-style-type: none"> <li>• <b>BE PO04</b> - <u>Laura Cipolla</u>, <i>“Material design for regenerative medicine application: expertise and results”</i></li> <li>• <b>BE PO07</b> - <u>Ester Colarusso</u>, Maria Giovanna Chini, Stefania Terracciano, Ines Bruno, Simone Di Micco, Marianna Potenza, Simona De Vita, Patrizia Gazzero, Assunta Giordano, Raffaele Riccio, Anil Bhushan, Panagis Filippakopoulos, Alfonso Reginelli, Giuseppe Bifulco, Gianluigi Lauro <i>“Identification of novel anti-leukemia agents targeting the bromodomain of BRD9”</i></li> <li>• <b>BE PO08</b> - <u>Simona De Vita</u>, Maria Giovanna Chini, Gianluigi Lauro, Marianna Potenza, Dafne Ruggiero, Stefania Terracciano, Ines Bruno, Raffaele Riccio, Jeffrey W. Bode, Andreas Koeberle, Oliver Werz, Francesco Maione, Alfonso Reginelli, Giuseppe Bifulco <i>“Inhibition of mPGES-1 and modulation of PGE2 biological activity for the treatment of colon cancer”</i></li> <li>• <b>BE PO06</b> - <u>M. Grimaldi</u>, A. Cavazza, C. Corradini <i>“Innovative material from agro alimentary by-products to realize a spray active packaging in a context of sustainability and Circular Economy”</i></li> <li>• <b>BE PO05</b> - <u>Pier Luigi Gentili</u> <i>“Soft Robotics and the Chemical Artificial Intelligence”</i></li> <li>• <b>BE PO11</b> - <u>Simone Maranghi</u>, Maria Laura Parisi, Riccardo Basosi, Adalgisa Sinicropi <i>“Methodologies for the sustainability evaluation of novel chemical products for innovative renewable energy technologies”</i></li> <li>• <b>BE PO13</b> - <u>Roberta Ragni</u>, Gabriella Buscemi, Danilo Vona, Marco Lo Presti, Gabriella Leone, Eleni Stavrinidou, Massimo Trotta, Gianluca Maria Farinola <i>“Hybrid Electronics based on Photosynthetic Organisms”</i></li> <li>• <b>BE PO02</b> - Ana Villacampa del Tiempo; Emma Palo; Carmen Claver; Fausto Gallucci; Blaž Likozar; Trond Halvorsen, Barbara Tišler; Olivier Vallet, <u>S. Vannuzzi</u> <i>“BIZEOLCAT: Bifunctional Zeolite based Catalysts and Innovative process for Sustainable Hydrocarbon Transformation”</i></li> </ul>

	<ul style="list-style-type: none"> <li>• <b>BE PO03</b> - <u>Gabriele Centi</u> on behalf of ENERGY-X Steering Committee “<i>ENERGY-X: Transformative chemistry for a sustainable energy future</i>”</li> <li>• <b>BE PO01</b> - <u>Siglinda Perathoner</u> on behalf of the A-LEAF Consortium “<i>An Artificial Leaf: a photo-electro-catalytic cell from earth-abundant materials for sustainable solar production of CO2-based chemicals and fuels (A-LEAF project)</i>”</li> </ul>
18:45-19:45	<p><b>Poster session of the brokerage event.</b></p> <p>In addition to those listed above for short oral presentation, the following contributions will be also presented</p> <ul style="list-style-type: none"> <li>• <b>BE PO09</b> - <u>Gabriele Centi</u> (project coordinator on behalf of the TERRA Consortium) “<i>TERRA: Tandem Electrocatalytic Reactor for Energy Resource Efficiency and Process Intensification</i>”</li> <li>• <b>BE PO10</b> - <u>Siglinda Perathoner</u> (project coordinator on behalf of the OCEAN Consortium) “<i>OCEAN - New electrochemical solutions for industrial processing, which contribute to a reduction of carbon dioxide emissions</i>”</li> <li>• <b>BE PO12</b> - <u>Gabriele Centi</u> on behalf of the Consortium “<i>SCOPE: An ERC Synergy Grant on Surface-CONfined fast-modulated Plasma for process and Energy intensification in small molecules conversion</i>”</li> <li>• <b>BE PO14</b> - Luca Antoniotti, Gustavo Capannelli, <u>Antonio Comite</u>, Anna Jezowska, Giancarlo Dondo, Simone Stasi, Sara Cepolina “<i>Pretreatment of waste lignocellulosic biomasses aimed at their chemical valorization</i>”</li> </ul>

	<b>Grand Hotel Salerno</b>
20:30-22:30	<i>Welcome Reception</i>

## WS1 – CHEMISTRY FOR SECURE SOCIETY

Thursday, August 29<sup>th</sup> 2019

<b>Centro Congressi Grand Hotel Salerno</b>	
<i>Chairperson: Matteo Guidotti, CNR-ISTM, Italy</i>	
9:00-9:20	<i>Welcome Remarks</i>
9:20-9:50	<i>WS1 KN01 - Genserik Reniers - TU Delft, the Netherlands “Integrating safety and security measures to avoid chemistry-related domino effects”</i>
9:50-10:10	<i>WS1 OR01 - Lidieta Giorno - CNR-ITM, Rende, Italy “Biocatalytic membrane reactors for organophosphates degradation”</i>
10:10-10:30	<i>WS1 OR02 - M. Maddalena Calabretta - Department of Chemistry “G. Ciamician”, University of Bologna, Italy “Origami paper-based chemiluminescent biosensor for neurotoxic compounds detection using an integrated smartphone device”</i>
10:30-11:00	<i>WS1 OR03 - Gaetano Carminati - Senior Technical Expert from the National Authority for the Prohibition of Chemical Weapons, Rome “Working for the Chemical Weapons Convention: interdisciplinary expertise and funding opportunities”</i>
11:00-11:30	Coffee break
<i>Chairperson: Elisa Micheli, University of Bologna, Italy</i>	
11:30-12:00	<i>WS1 KN02 - Adolfo Gregori - Carabinieri, Department of Scientific Investigation (RIS), Italy “Simultaneous Determination of Gunshot Residues and Stabilizers in Forensic Samples by means UHPLC-HRMS analysis”</i>
12:00-12:20	<i>WS1 OR04 - Lai Van Cuong - Centre of Environmental Treatment Technology, Chemical Core, Ministry of National Defence, Ha Noi, Viet Nam “Lessons learnt and identified issues related to CBRN Joint Field Training Exercise in ASEAN Nations”</i>
12:20-12:40	<i>WS1 OR05 - Simona Ortelli - CNR-ISTEC, Faenza, Italy “Coatings based on TiO<sub>2</sub> nanoparticles and biomacromolecules as a new flame retardant approach for cotton fabrics”</i>
12:40-13:00	<i>WS1 OR06 - Salvatore Corrao - Italian Fire Brigade Corps, Italy “Study of an organizational model for the operational response of an Italian CBRN Module within the European Civil Protection Mechanism”</i>
13:00-15:00	Break and Poster view
<i>Chairperson: Roberto Mugavero - OSDIFE, Italy</i>	
15:00-15:30	<i>WS1 KN03 - Arben Merkoçi - Inst. Català de Nanociencia i Nanotecnologia, Barcelona, Spain “Nanobiosensors for diagnostics: from health, environment to safety and security applications”</i>
15:30-15:50	<i>WS1 OR07 - Daniele Del Gaudio - Italian Army, Italy “7th CBRN defense regiment “Cremona” a special unit against CBRN events”</i>
15:50-16:20	<i>WS1 KN04 - Chiara Bisio - University of Eastern Piedmont, Alessandria, Italy “Innovative layered materials as active allies for the decontamination of toxic chemical agents”</i>
16:20-17:00	<i>WS1 Round Table with institutional representatives, coordinated by R. Mugavero</i>

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17:00-17:20	<p>WS1 OR08 - <i>Ferruccio Trifirò – Università degli Studi di Bologna, Accademia delle Scienze dell'Istituto di Bologna, Italy</i>  <i>“How to avoid dual-use toxic substances in chemical industry”</i></p>
17:20-19:00	<b>Poster Session of WS1</b>
	<p>WS1 PO01 - <i>Tanurima Bhaumik, Jayanta Mandal, Kunal Pal, Parimal Karmakar</i>  <i>“Rhodamine 6G based fluorescent chemosensors for selective detection of Al<sup>3+</sup> ion: Effect of substituent and ring strain in enhancing its sensing performance.”</i></p>
	<p>WS1 PO02 - <i>Amrita Saha, Pravat Ghorai, Priyabrata Banerjee</i>  <i>“A Cd(II) Based Coordination Polymer Series: Fascinating Structure and Promising Nitro Aromatic Sensing Property”</i></p>
	<p>WS1 PO03 - <i>Tapan Kumar Mondal</i>  <i>“Development of smart fluorescence probes for efficient recognition of hazardous species and application as biomarker”</i></p>
	<p>WS1 PO04 - <i>Arunabha Thakur, Sushil Ranjan Bhatta, Bijan Mondal</i>  <i>“Metal-Coordination Driven Intramolecular Twisting: A Turn-On Fluorescent-Redox Probe for Hg<sup>2+</sup> Ion Sensing through the Interaction of Ferrocene Nonbonding Orbital and Dibenzylidenehydrazine</i></p>
	<p>WS1 PO05 - <i>Roberto Consolo, Matteo Guidotti, Raffaella Soave, Vladimiro Dal Santo, Anna Ferretti, Laura Polito, Claudio Evangelisti, Stefano Econdi</i>  <i>“A European Project for strengthening the chemical and biological waste management in Central Asia countries for improved security and safety risk mitigation”</i></p>
	<p>WS1 PO06 - <i>Matteo Guidotti, Massimo C. Ranghieri, Stefano Econdi</i>  <i>“Detection, Identification and Monitoring of Chemical Warfare Agents, CWAs: a comparison between on-field and in-lab approach”</i></p>
	<p>WS1 PO07 - <i>Stefano Econdi, C. Bisio, F. Carniato, G. Gatti, A. M. Katsev, S. L. Safronyuk, M. Guidotti</i>  <i>“Design and optimization of Prussian Blue particles for the decontamination of aqueous media from potentially radioactive caesium”</i></p>
	<p>WS1 PO08 - <i>Vincenzo Vaiano, Giuseppina Iervolino, Vincenzo Palma</i>  <i>“Removal of organic pollutants from aqueous solutions by dielectric barrier discharge non-thermal plasma reactor”</i></p>
	<p>WS1 PO09 - <i>Roberto Mugavero, S. Abaimov</i>  <i>“CBRNe Critical Infrastructures and Cyber Security”</i></p>
	<p>WS1 PO10 - <i>Antonia Lopreside, Maria Maddalena Calabretta, Laura Montali, Xinyi Wan, Baojun Wang, Aldo Roda, Elisa Michellini</i>  <i>“Whole-cell biosensors and cell-free systems: new tools for rapid and sensitive detection of heavy metal and bacterial contamination in water”</i></p>
	<p>WS1 PO11 - <i>Emilia Paone, Angela Malara, Patrizia Frontera, Lucio Bonaccorsi, Francesco Mauriello</i>  <i>“Exploitation of Coffee Silverskin as sustainable adsorbent material for heavy metals remediation of contaminated water”</i></p>
	<p>WS1 PO12 - <i>M. Martino, V. Palma, C. Ruocco</i>  <i>“Ceria-coated aluminum foams as promising catalysts for the water gas shift process”</i></p>
	<p>WS1 PO13 - <i>S. Marchesi, F. Carniato, M. Botta, L. Marchese, M. Guidotti, C. Bisio</i>  <i>“Extraction of Lanthanide Ions from Aqueous Solutions with Synthetic Saponite Clays”</i></p>
	<p>WS1 PO14 - <i>Simona Cavallini, Beatrice Errico, Federico Benolli</i>  <i>“SYnergy of integrated Sensors and Technologies for urban sEcured environMent (SYSTEM)”</i></p>

*Chemistry meets Industry & Society (CIS2019) - Scientific Program*

WS1 PO15 - <i>Simona Cavallini, Federico Benolli</i> “Strengthening chemical and biological waste management in Central Asia countries for improved security and safety risk mitigation (EU CBRN CoE Project 65 - CABICHEM)”
WS1 PO16 - <i>Olga Sacco, Wanda Navarra, Vincenzo Vaiano</i> “N-Doped Semiconductors for Photocatalytic Removal of Organic Pollutants”
WS1 PO17 - <i>Veronica Caratelli, Giulio Dionisi, Silvia Fillo, Nino D'Amore, Alfredo Sansubirino, Florigio Lista, Fabiana Arduini</i> “Antibody-free biosensors for on site botulinum neurotoxin detection”
WS1 PO18 - <i>A. Testolin, V. Pifferi, L. Falciola, C. Ingrosso, M. Corricelli, A. Agostiano, M. Striccoli, M. L. Curri, F. Bettazzi, I. Palchetti</i> “An Electrochemical Approach to Understand the Enhanced Performances of Gold-Based Hybrid Nanomaterials”
WS1 PO19 - <i>Elena Lucenti, Elena Cariati, Daniele Marinotto, Andrea Previtali, Stefania Righetto</i> “Cyclic Triimidazole Derivatives as Potential Sensors of Explosives”

<b>Grand Hotel Salerno</b>	
20:00-22:00	Conference Dinner

**Friday, August 30<sup>th</sup> 2019**

<b>Centro Congressi Grand Hotel Salerno</b>	
<i>Chairperson: Vincenzo Vaiano, University of Salerno, Italy</i>	
9:00-9:30	WS1 KN05 - <i>Vasile Parvulescu - University of Bucharest, Romania</i> “Photocatalysis versus plasma-coupled catalysis for the mineralization of warfare and harmful compounds” Thematic Lecture offered by Molecules, an open access journal by MDPI
9:30-9:50	WS1 OR09 - <i>Raja Subramaniam - Centre for Chemical Weapons Analysis, Malaysia</i> “Strategies for analysis of chemical weapons for forensic and legal prosecution”
9:50-10:10	WS1 OR10 - <i>Federico Begni - University of Eastern Piedmont, Alessandria, Italy</i> “Hyper cross-linked polymers for the removal of harmful pollutants from the environment”
10:10-10:30	WS1 OR11 - <i>Isacco Gualandi - University of Bologna, Italy</i> “Detection of hazardous chemicals (pesticides) by electrochemical sensors”
10:30-11:00	WS1 KN06 - <i>Mauro Marchetti - CNR-ICB, Sassari, Italy</i> “Hypothesis of remote identification of warfare chemical agents and explosives after blast of chemical bombs”
11:00-11:30	Coffee break
<i>Chairperson: Ernesto Salzano, University of Bologna, Italy</i>	
11:30-12:00	WS1 KN07 - <i>Fabiana Arduini - University of Rome Tor Vergata, Italy</i> “Early and on site detection of chemical and biological warfare agents using miniaturised electrochemical biosensors”
12:00-12:20	WS1 OR12 - <i>Andrei Katsev - Medical Academy Georgievsky, Simferopol, Crimea</i> “Detection of the toxicity of environmental and pharmaceutical substances by luminescence biotests”
12:20-12:40	WS1 OR13 - <i>Stefano Scaini - Senior Safety &amp; Security Advisory, Italy</i> “Unconventional use of High Explosives & Energetic Materials: facing the I.E.D.s Threat”

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12:40-13:00	<i>WS1 OR14 - Davide Janner - Politecnico di Torino - Department of Applied Science and Technology "Nanostructured gold surface for reliable and low-cost SERS detection of contaminants in water"</i>
13:00-15:00	<i>Break and Poster view</i>
<i>Chairperson: Massimo Raghieri, ACISMOM Military Corps, Italy</i>	
15:00-15:20	<i>WS1 OR15 - Rosalind Sankey and Carlos Rodriguez Del Rio – Elsevier "Using information solutions to understand the potential risks and control strategies of substances"</i>
15:20-15:40	<i>WS1 KN08 - Sergey Zinoviev - OPCW's Senior International Cooperation Officer, AIA, Netherlands "Working for the Chemical Weapons Convention: interdisciplinary expertise and funding opportunities" - to be confirmed</i>
15:40-16:05	<i>WS1 OR16 - Davide Vignola - Pollution Analytical Equipment, Italy "Detection of highly toxic chemicals, explosives and explosive taggants in the air"</i>
16:05-16:25	<i>WS1 OR17 - Stefano Marchesi - University of Eastern Piedmont, Alessandria, Italy "Bi-functional Eu(III) and Nb(V)-containing Saponite Clays for the Optical Detection and Catalytic Abatement of Chemical Warfare Agents"</i>
16:25-16:45	<i>WS1 OR18 - Murugiah Muthusamy - Fire &amp; Rescue Training Academy, Malaysia "Strategies for analysis of chemical weapons for forensic and legal prosecution"</i>
16:45-17:10	<i>WS1 OR19 - Antonio Sergio - DuPont, Italy "For greater good"</i>
17:10-17:30	<i>WS1 OR20 - Gianmaria Pio - Department of Civil, Chemical, Environmental and Materials Engineering DICAM, University of Bologna, Italy "Fire security and safety of chemical warehouses"</i>
17:30-17:45	<b>Closing Remarks</b>

## WS2 – CHEMISTRY MEETS BIOECONOMY



Thursday, August 29<sup>th</sup> 2019

<b>Centro Congressi Grand Hotel Salerno</b>	
<p><i>Conveners: Oreste Piccolo - Green and Sustainable Chemistry Interdivisional Group; Lucia Gardossi - Biotechnology Interdivisional Group; Cristina Nativi - Chemistry of Carbohydrates Interdivisional Group; Marco Arlorio - Food Chemistry Interdivisional Group; James Clark - Green Chemistry Centre of Excellence, University of York, UK</i></p> <p><i>Chairperson: Oreste Piccolo, James Clark</i></p>	
9:00-9:30	<p>WS2 KN01 – James H. Clark (University of York) “Towards a Circular Bio-Economy using Green Chemistry”</p>
9:30-10:00	<p>WS2 KN02 – Tiziana Milizia (Novamont) “From Novamont Group a virtuous example of regeneration of deindustrialised sites: Mater-Biopolymer, the highly efficient continuous plant for Origo-Bi biopolyesters production”</p>
10:00-10:30	<p>WS2 KN03-Mario Malinconico (CNR IPCB) “Cellulose, lignin and friends: Waste side stories”</p>
10:30-11:00	<p>WS2 KN04-Carlotta Gobbi, Valerio Borzatta (Endura) “Controlled release formulations with reduced environmental impact”</p>
11:00-11:30	Coffee break
<p><i>Chairperson: Lucia Gardossi, Nicoletta Ravasio</i></p>	
11:30-12:00	<p>WS2 KN05-Lisa Vaccari (Elettra Sincrotrone Trieste) “FTIR microscopy, tomography and nanoscopy for advanced morpho-chemical characterization of renewable materials using state-of-the art IR sources”</p>
12:00-12:30	<p>WS2 KN06-Piergiuseppe Morone (Unitelma Sapienza) “Change We Can Make: the role of society in the transition towards a circular bioeconomy”</p>
12:30-13:00	<p>WS2 KN07-Fabio Fava (Università di Bologna) “Integrated biowaste exploitation in the frame of circular Bioeconomy: state of the art and opportunities offered by Horizon2020 and the PPP Biobased industry”</p>
13:00-15:00	Break and Poster view
<p><i>Chairperson: Carmine Capacchione, Laura Cipolla, Marco Arlorio Cristina De Castro, Federica Zaccheria</i></p>	
15:00-15:15	<p>WS2 OR01- Alisar Kiwan, Eleonora Torricelli, Chiara Samorì, Daniele Pirini, Paola Galletti, Cristian Torri “Polyhydroxyalkanoates from sewage sludge: the B-PLAS proof of concept”</p>
15:15-15:30	<p>WS2 OR02- Matteo Francavilla, Mauro Marone, Paolo Marasco, Massimo Monteleone “Reuse of anaerobic digestion effluent for microalgae biorefinery (RAMBIO Project)”</p>
15:30-15:45	<p>WS2 OR03- Achille Monegato, Tommaso Carofiglio, Ketty Costacurta “Nano crystalline cellulose (CNC) and its application in paper industry”</p>

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15:45-16:00	WS2 OR04- Paola Fini, Vito Rizzi, Jennifer Gubitosa, Fabio Romanazzi, Dario Lacalamita, Roberto Romita, José Antonio Gabaldón, María Isabel Fortea Gorbe, Teresa Gómez-Morte, Vicente Manuel Gómez López, Angela Agostiano, Pinalysa Cosma “Food and Agricultural wastes as Bioresources: recyclable bio-adsorbents to remove/recover emerging Pollutants from water for industrial applications”
16:00-16:15	WS2 OR05- Reuben Carr, Fraser Brown, Philip Weyrauch, Alison Arnold, Magali Roger, Frank Sargent, David Smith “Improving the Sustainability of Biobased Manufacturing”
16:15-16:30	WS2 OR06- Robert McElroy, Roxana Milesco, James Sherwood, Fergal Byrne, Andrew Hunt, Thomas Farmer, James Clark “S4 – Intelligent solvent selection towards greening applications”
16:30-16:45	WS2 OR07- Rita Nasti, Federica Zaccheria, Franco Cavazza, Nicoletta Ravasio, Luisella Verotta “Silverskin: from waste to a renewable source of bioactive compounds”
16:45-17:00	WS2 OR08- Paola Di Donato, Annarita Poli, Roberto Abbamondi, Ilaria Finore, Barbara Nicolaus “The waste- based biorefinery for the sustainable production of energy and value-added molecules”
17:00-17:15	WS2 OR09- Marco Arlorio, Matteo Bordiga, Jean Daniel Coisson, Fabiano Travaglia, Monica Locatelli, Daniela Barile “Recovery of high-value ingredients for functional foods and food supplements from wastes and by-products: prebiotic oligosaccharides as case study”
17:15-17:30	WS2 OR10- Alessandro Piccolo, Mariavittoria Verrillo, Melania Salzano, Vincenza Cozzolino, Riccardo Spaccini “New potential nutraceutical application and chemical characterization of Humic matter extracted from green compost”

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17:30-19:00	<b>Poster Session of WS2</b>
	W2S PO01- Isabella Lancellotti, Luisa Barbieri, Fernanda N. Andreola, Grazia Totaro, Laura Sisti, Maurizio Fiorini, Andrea Saccani “Residues from Coffee Production and Consume: Formulation of Polymeric and Clayey Materials”
	WS2 PO02- Eleonora Torricelli, Alisar Kiwan, Chiara Samorì, Daniele Pirini, Paola Galletti, Cristian Torri “B-PLAS DEMO project: Reliable conversion of VFA from fermentation into polyhydroxyalkanoates”
	WS2 PO03- Valeria Pappalardo, Denise Cavuoto, Federica Zaccheria, Nicoletta Ravasio “Synthesis of biosurfactant by solid acid catalysts”
	WS2 PO04- Federica Zaccheria, Valeria Pappalardo, Nicola Scotti, Rinaldo Psaro, Nicoletta Ravasio “Catalytic upgrading of lactose: a rest raw material from the dairy industry”



<p>WS2 PO05- <i>Carminé Capacchione, David H. Lamparelli, Alfonso Grassi, Stefano Milione, Francesco Della Monica, Antonio Buonerba, Antonio Proto, Veronica Paradiso</i>  <i>“Toward more sustainable elastomers: stereoregular polymerization and copolymerization of natural linear terpenes”</i></p>
<p>WS2 PO06- <i>Giorgio Tofani, Iris Cornet, Serge Tavernier</i>  <i>“Alternative approach in the filler recovery from recycled paper waste stream”</i></p>
<p>WS2 PO07- <i>Giovanna Speranza, Kalliopi Avramidou, Sara Sangiorgio, Giuseppe Cappelletti, Denise Cavuoto, Nicoletta Ravasio, Teodora Bavaro, Giorgio Marrubini, Daniela Ubiali</i>  <i>“Lipase-catalyzed synthesis of sugar fatty acid esters, a class of non-ionic, bio-based surfactants”</i></p>
<p>WS2 PO08- <i>Giovanna Speranza, Nikolina Vidovic, Sara Sangiorgio, Mattia Cambò, Kalliopi Avramidou, Filippo Fiorentini, Anna Peschiera, Silvia Rapacioli, Teodora Bavaro, Daniela Ubiali</i>  <i>“Enzymatic hydrolysis of protein-rich vegetable matrices. Production and bioactivity evaluation of Hydrolyzed Vegetable Proteins”</i></p>
<p>WS2 PO09- <i>Elisabetta Parodi, Antonella Petri, Oreste Piccolo</i>  <i>“Valorization of low-value products from oil-seed pressing process”</i></p>
<p>WS2 PO10- <i>Reshma Babu, Gustavo Capannelli, Antonio Comite</i>  <i>“Wastewater Biomass Treatment for Their Valorization”</i></p>
<p>WS2 PO11- <i>Tiziana Esposito, Francesca Sansone, Carla Vilela, Nuno H.C.S. Silva, Adelaide Almeida, Annalisa Piccinelli, Rita Patrizia Aquino, Carmen S.R. Freire, Teresa Mencherini</i>  <i>“Design and Development of new packaging films loaded with Chestnut Spiny Burs and Roasted Hazelnut Skins hydroalcoholic extracts”</i></p>
<p>WS2 PO12- <i>Aristide Giuliano, Isabella De Bari</i>  <i>“Technical Assessment of Lignin Valorization Processes”</i></p>
<p>WS2 PO13- <i>Salvatore Impemba, Francesco Della Monica, Carmine Capacchione, Alfonso Grassi, Stefano Milione</i>  <i>“[OSSO]-Type Iron (III) complex for the ring opening polymerization of cyclic esters”</i></p>
<p>WS2 PO14- <i>Mariachiara Spennato, Alice Guarneri Benedetta Rigo, Fioretta Asaro, Cynthia Ebert, Lucia Gardossi</i>  <i>“Biocatalysis for the synthesis and functionalization of renewable polymers and composite materials: taking inspiration from nature”</i></p>
<p>WS2 PO15- <i>Emilia Paone, Maria Michela Dell’Anna, Vito Gallo, Pietro Mastrorilli, Francesco Mauriello, Rosario Pietropaolo</i>  <i>“Transfer hydrogenolysis of lignin and its derived aromatic ethers promoted by the bimetallic Pd/Co catalyst”</i></p>
<p>WS2 PO16- <i>Luca Antoniotti, Gustavo Capannelli, Antonio Comite, Anna Jezowska, Giancarlo Dondo, Simone Stasi, Sara Cepolina</i>  <i>“Pretreatment of waste lignocellulosic biomasses aimed at their chemical valorization”</i></p>
<p>WS2 PO17- <i>Laura Cipolla, Marco Mangiagalli, Beatrice Sciandra, Stefania Brocca, Giacomo Di Foggia, Massimo Beccarello, Marina Lotti</i>  <i>“Enzymatic hydrolysis of lactose to exploit cheese whey as a source of chemical building blocks”</i></p>
<p>WS2 PO18- <i>Cristiano Bolchi, Gianfranco Gilardi, Giovanna Di Nardo, Marco Pallavicini, Claudio Tonin, Marina Zoccola</i>  <i>“FALstaff project: Fatty Acids from Lanolin. Waste wool wax as a source of fatty acids and valuable <math>\alpha</math>-hydroxy fatty acids by integrated biocatalytic and sustainable physico-chemical methods”</i></p>
<p>WS2 PO19- <i>Davide Carraro, Emanuele Amadio, William Denis, Cristiano Zonta, Giulia Licini</i>  <i>“Towards Aerobic Catalytic Biomass Valorization: from simple models to lignin depolymerization”</i></p>

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WS2 PO20- *Fabrizio Passarini, Mirco Volanti, Nicola Schiaroli, Carlo Lucarelli, Sabrina Copelli, Angelo Vaccari, Benedetta Pellini*  
“*Life cycle assessment of industrial syngas production: comparison between a new steam/dry reforming process and traditional routes*”

WS2 PO21 – *Mauro Giorcelli, Mattia Bartoli, Carlo Rosso, Alberto Tagliaferro*  
“*Biochar: a new carbon filler for composite able to improve electrical and mechanical properties*”

	<b><i>Grand Hotel Salerno</i></b>
20:00-22:30	<i>Conference Dinner</i>

## WS3 - SMART PEPTIDE CHEMISTRY FOR NEXT GENERATION INDUSTRY IN A SUSTAINABLE SOCIETY

Friday, August 30<sup>th</sup> 2019

<i>Centro Congressi Grand Hotel Salerno</i>	
<i>Conveners: Luis Moroder, Claudio Toniolo</i>	
<b>Session I: Peptides for biomedicine and nanomedicine</b>	
<i>Chairperson: Claudio Toniolo (University of Padua)</i>	
9:00-9:40	WS3 IL01 – Michael Chorev (Harvard Medical School) <i>Disease-relevant post-translationally non-enzymatically modified biomarker – a challenge and its solution</i>
9:40-10:00	WS3 OR05 – Giancarlo Morelli (CIRPEB, University of Naples ‘Federico II’) <i>Easy formulation of liposomal Doxorubicin modified with a Bombesin peptide analogue for selective targeting of GRP receptors over-expressed by cancer cells</i>
10:00-10:20	WS3 KN01 – Antonio Ricci (Fresenius Kabi) <i>Therapeutic peptide API manufacturing production: an industry perspective</i>
10:20-10:40	WS3 OR08 – Paolo Rovero (University of Florence) <i>The Industry-University Joint Laboratory for the Synthesis of Peptides of Pharmaceutical Interest (PeptFarm): a new efficient tool for technology transfer at the University of Florence</i>
10:40-11:00	WS3 OR06 – Maria Luisa Nolli (NCNbio) <i>Biodrugs and advanced therapy medicinal products: a revolution in medicine</i>
11:00-11:30	Coffee break
<b>Session II: Peptides for biomedicine and nanomedicine</b>	
<i>Chairperson: Luis Moroder (Max Planck Institut for Biochemistry)</i>	
11:30-12:00	WS3 IL02 – Timo Nuijens (Enzyep, Netherlands) <i>Efficient chemo-enzymatic synthesis (CEPS) of incretin peptides</i>
12:00-12:20	WS3 KN02 – Michele Saviano (CNR, Bari) <i>Molecular targeting for Precision Medicine</i>
12:20-12:40	WS3 OR03 – Fernando Formaggio (University of Padua) <i>Chemical modifications to improve peptide enzymatic stability</i>
12:40-13:00	WS3 OR01 – Maria Vittoria Barone (University of Naples) <i>Gliadin Peptide P31-43 as Trigger of the Proliferative and Stress/Innate Immune Response of the Celiac Small Intestinal Mucosa</i>
13:00-15:00	Break and Poster view
<i>Chairperson: Giancarlo Morelli (University of Naples ‘Federico II’)</i>	
15:00-16:00	Panel Discussion: Peptides for industry in a sustainable society
<b>Session III: Peptide Nutraceuticals and Cosmeceutics</b>	
<i>Chairperson: Anna Maria Papini (University of Florence)</i>	
16:00-16:20	WS3 OR07 – Giacomo Pepe (University of Salerno) <i>The health promoting potential of buffalo ricotta cheese-derived peptides</i>
16:20-16:40	WS3 OR02 – Fosca Errante (University of Florence) <i>Anti-ageing peptides derived from serpin A1 for cosmeceutical uses</i>
<b>Session IV: Peptide Engineering and Smart Materials</b>	
16:40-17:00	WS3 OR04 – Emanuela Gatto (University of Rome Tor Vergata) <i>Novel Peptide Bioinspired and biodegradable approach for solar energy conversion</i>
17:00-18:30	<b>Poster Session of WS3</b>
WS3 PO01 - Barbara Biondi (CNR, University of Padua)	

<i>“SPPS alternative strategies for the production of Degarelix”</i>
WS3 PO02 - Annunziata D’Ercole (University of Florence) <i>“Development of new approaches to alternative cyclization strategies from lab scale to pilot scale production of peptides. Academic research of constrained lead peptides for long-term industrial development”</i>
WS3 PO03 - Fernando Formaggio (University of Padua) <i>“Covalent grafting of lipopeptides on cotton fibers</i>
WS3 PO04 - Emanuela Gatto (University of Rome Tor Vergata) <i>2D and 3D peptide nanostructures for health, sensing and solar energy conversion”</i>
WS3 PO05 - Manuela Grimaldi (University of Salerno) <i>“Characterization of Lanreotide Autogel using combination of imaging and magic angle spinning NMR spectroscopy with atomic force microscopy”</i>
WS3 PO06 - A. Mazzoleni (University of Florence) <i>“N-glycosylated peptide conjugates for an antigen-specific immunotherapy of multiple sclerosis”</i>
WS3 PO07 - Olivier Monasson (University of Paris.Seine) <i>“Peptlab@UCP: a prototype platform for cGMP large scale peptide synthesis to favour phase I and II clinical studies”</i>
WS3 PO08 - Giacomo Pepe (University of Salerno) <i>“Novel decameric peptide of Spirulina platensis with potent in vivo antihypertensive activity”</i>

## WS4 - CHEMISTRY MEETS LIGHT: APPLICATIONS AND PERSPECTIVES IN THE FIELDS OF ENERGY, ENVIRONMENT, HEALTH, NANOTECHNOLOGY, FOOD AND CULTURAL HERITAGE

Thursday, August 29<sup>th</sup> 2019

<i>Centro Congressi Grand Hotel Salerno</i>	
<i>Conveners: Alberto Credi, A. Prasanna de Silva, Margherita Venturi</i>	
<i>Chairperson: Margherita Venturi</i>	
9:00-9:40	<i>WS4 PL01 – A. Prasanna de Silva Fluorescent sensing and logic systems</i>
9:40-10:05	<i>WS4 KN01 – Francisco Raymo Photoswitchable fluorophores for bioimaging applications</i>
10:05-10:30	<i>WS4 KN02 – Serena Silvi Molecular devices and machines: challenges and perspectives</i>
10:30-10:45	<i>WS4 OR01 – Chao-Yi Yao Molecular computational identification (MCID) of small objects in populations</i>
10:45-11:00	<i>WS4 OR02 – Erica Paltrinieri Light effected autonomous molecular pumps</i>
11:00-11:30	Coffee break
<i>Chairperson: A. Prasanna de Silva</i>	
11:30-12:00	<i>WS4 KN03 – Licheng Sun Water splitting for solar fuels - From natural to artificial photosynthesis</i>
12:00-12:30	<i>WS4 KN04 – Aldo Di Carlo 2D Materials for perovskite photovoltaics: from graphene to MXenes</i>
12:30-12:45	<i>WS4 OR03 – Sara Gullace Characterization of novel nanostructured gold counter electrodes for dye sensitized solar cells</i>
12:45-13:00	<i>WS4 OR04 – Bibhuti Bhushan Show Electrochemical synthesis of oxide and sulphide semiconductor thin films: their characterizations and applications</i>
13:00-15:00	Break and Poster view
<i>Chairperson: Alberto Credi</i>	
15:00-15:30	<i>WS4 KN05 – Timothy Noël Solar photochemistry coming of age? – The development of luminescent solar concentrator-based photomicroreactors</i>
15:30-16:00	<i>WS4 KN06 – Stefano Protti Photoinduced sustainable arylations</i>
16:00-16:15	<i>WS4 OR05 – Roberto Comparelli Visible light active nanocrystalline photocatalysts for environmental applications</i>
16:15-16:30	<i>WS4 OR06 – Andrea Pucci NIR Reflective surfaces based on organic coatings</i>
16:30-17:00	<i>WS4 KN07 – Simona Ghiani Dye-based imaging probes for contrast-enhanced imaging applications</i>
17:00-17:30	<i>WS4 KN08 – Engin U. Akkaya Recent progress in the chemistry of photodynamic therapy</i>

17:30-18:00	WS4 KN09 – Aldo Romani <i>Is the light only harmful to artworks?</i>
18:00-19:00	<b>Poster Session of WS4</b>
	WS4 PO01- <u>Claudia Barolo</u> , Nadia Barbero, Andrea Fin, Alessandra Fiorio Pla, Sonja Visentin and Guido Viscardi <i>“Functional dyes for photoactive materials: from the synthesis to the biomedical applications”</i>
	WS4 PO02- <u>Federico Bella</u> , Lucia Fagiolari, Alberto Scalia, Matteo Bonomo, Simone Galliano, Andrea Lamberti, Claudia Barolo, Claudio Gerbaldi <i>“Aqueous Photovoltaics and Integrated Portable Devices: Novel Trends in the Solar Cells Scenario”</i>
	WS4 PO03- <u>Amalia Velardo</u> , <u>Alessandro Landi</u> , Amedeo Capobianco, and Andrea Peluso, <i>“Rates of Elementary Charge Separation and Charge Recombination Processes in BHJ solar cells”</i>
	WS4 PO04- <u>Alberto Credi</u> , Sergey A. Denisov, Gediminas Jonusauskas, Marcello La Rosa, Nathan D. McClenaghan <i>“Designed long-lived luminescence in quantum dot-chromophore conjugates”</i>
	WS4 PO05- <u>M. Dell’Edera</u> , F. Petronella, T. Sibillano, C. Giannini, A. Agostiano, M. L. Curri, R. Comparelli <i>“Development of novel deposition strategies of nano-TiO<sub>2</sub> onto unconventional substrates for wastewater treatment”</i>
	WS4 PO06- <u>C.N. Dibenedetto</u> , E. Fanizza, A. Panniello, A. Agostiano, M.L. Curri, M. Striccoli <i>“Design of colloidal QD dimers towards quantum optical coherence”</i>
	WS4 PO07- <u>Marianna Diterlizzi</u> , Stefania Zappia, Silvia Destri, Riccardo Po’ <i>“Water-processable blend nanoparticles for sustainable organic solar cells”</i>
	WS4 PO08- <u>Alessandro Emendato</u> , Antonio Ruggiero, Michele Laus, Federico Ferrarese Lupi, Katia Sparnacci, Finizia Auriemma, Claudio De Rosa, Anna Malafronte <i>“Block copolymer based hybrid nanocomposite materials for photovoltaic applications”</i>
	WS4 PO09- <u>R. Giannantonio</u> , F. Matteucci, R. Comparelli, L. Curri, G. Mascolo <i>“Nanostructured photocatalysts combined with UV radiation for water treatment”</i>
	WS4 PO10- <u>Alessandro Gradone</u> , Raffaello Mazzaro, Francesco Romano, Vittorio Morandi, Paola Ceroni <i>“Luminescent Solar Concentrators based on Silicon Nanocrystals”</i>
	WS4 PO11- <u>Claudia Graiff</u> , Laura Bergamonti, Pier Paolo Lottici, Carlo Bergonzi, Ruggero Bettini, Lisa Elviri <i>“Design of 3D printed chitosan-TiO<sub>2</sub> scaffolds for removal of amoxicillin from wastewater by photodegradation”</i>
	WS4 PO12- <u>Claudio Imparato</u> , Marzia Fantauzzi, Giuseppina Iervolino, Can Koral, Antonello Andreone, Gerardino D’Errico, Vincenzo Vaiano, Antonella Rossi, Antonio Aronne <i>“Noble metal-free photocatalytic hydrogen evolution on gel-derived defective TiO<sub>2</sub>”</i>
	WS4 PO13- <u>Francesca Mancuso</u> , Barbara Prandi, Giovanna Lippe and Mara Lucia Stecchini <i>“Pre-slaughter feed restriction beneficially influences gastric digestibility of sea bream (<i>Sparus aurata</i> L.) fillet”</i>
	WS4 PO14- <u>Luigi Menduti</u> , Alberto Bossi, Serena Arnaboldi, Clara Baldoli, Emanuela Licandro <i>“Luminescent boron-functionalized benzodithiophenes”</i>
	WS4 PO15- <u>Federica Menegazzo</u> , Michela Signoretto, Andrea Campostrini, Danny Zanardo, Giuseppe Cruciani, Giorgio Berto, Luca Scappin <i>“Photocatalysts in the formulation of traditional Venician Marmorino”</i>

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<i>WS4 PO16- <u>Pier Paolo Prosini</u>, <u>Ivan Fuso Nerini</u>, <u>Mariasole Di Carli</u>, <u>Gabriele Tarquini</u>, <u>Paola Gorini</u>, <u>Livia Della Seta</u> “Development of high capacity lithium sulphur batteries”</i>
<i>WS4 PO17- <u>Andrea Pucci</u>, <u>Pierpaolo Minei</u>, <u>Giuseppe Iasilli</u>, <u>Francesco Picchioni</u>, <u>Giacomo Ruggeri</u> “New materials for luminescent solar concentrators”</i>
<i>WS4 PO18- <u>Diana Sannino</u>, <u>Vincenzo Vaiano</u> “Environmental Applications and Organic Syntheses in a UVA-LEDs Photocatalytic Fluidized Bed Reactor”</i>
<i>WS4 PO19- <u>Martina Ussia</u>, <u>Giusy Curcuruto</u>, <u>Maria Miritello</u>, <u>Vittorio Privitera</u>, <u>Sabrina Carola Carroccio</u> “Time-saving formulation of Nickel-free 3D graphene for Visible-Light photocatalysis”</i>
<i>WS4 PO20- <u>Chao-Yi Yao</u>, <u>Jue Ling</u>, <u>Linyihong Chen</u>, <u>A. Prasanna de Silva</u> “Population Analysis of Molecular Computational Identification (MCID) of Small Objects and its Extension to the Near Infrared Region”</i>

	<b>Grand Hotel Salerno</b>
20:00-22:30	Conference Dinner

## WS5 - SUSTAINABILITY OF PRODUCTS

Thursday, August 29<sup>th</sup> 2019

<i>Centro Congressi Grand Hotel Salerno</i>	
<i>Conveners: M. Di Serio, C. Gaburri, S. Perathoner</i>	
<i>Chairperson: G. Centi</i>	
9:00 - 9:15	WS5 - OPENING
9.15-10.00	WS5-KN01 G. Iaquaniello (NEXTCHEM). <i>Waste reuse for a circular economy</i>
10.00-10.20	WS5-KN02 D. Röttegen (AMBIENTALEX). <i>End of Waste in European Union</i>
10.20-10.40	WS5-KN03 F. Amelio (DELOITTE). <i>Sustainability Reporting Standard</i>
10.40-11.00	WS5-KN04 A. Collina (MAPEI). <i>Sustainability for MAPEI Facts not Words</i>
11:00-11:30	Coffee break
<i>Chairperson: R. Tesser</i>	
11.30-11.50	WS5-KN05 S. Viticoli (AIRI). <i>Responsible Research and Innovation (RRI)</i>
11.50-12.10	WS5-KN06 N. Ballarini (CLARIANT PRODOTTI) <i>The role of sustainability in the manufacture and use of catalysts</i>
12.10-12.25	WS5-OR01 M. Saviano (UNISA) <i>The Strategic Role of Chemistry in Developing Innovative Health Products for Sustainability: A Science-Policy-Industry Helix Model</i>
12.25-12.40	WS5-OR02 M. Vannini (UNIBO) <i>Insights into the synthesis of PEF from FDCA: steps toward environmental and food safety excellence in packaging applications</i>
12.40-12.55	WS5-OR03 D. Smacchia (VINAVIL) <i>Substitution of SVHC: an alternative to PFOA and its derivatives for textile finishing products</i>
13:00-15:00	Break and Poster view
<i>Chairperson: A. Salvini</i>	
15.00-15.15	WS5-OR04 C. Graiff (UNIPR) <i>Cellulose nanocrystals from waste paper, mixed with silver nanoparticles, as reinforcing agent with biocidal activity for paper preservation</i>
15.15-15.30	WS5-OR05 F. Taddeo (UNINA) <i>Esters from pelargonic acid and their application as green solvents for printing inks</i>
15.30-15.45	WS5-OR06 G. Grillo (UNITO) <i>Multi-stage ultrasound-assisted extraction of tea process-residues: a kinetic approach</i>
15.45-16.00	WS5-OR07 F. Matteucci (DHITECH) <i>The importance of the ecosystem of innovation within water treatment technologies development</i>
16.00-16.15	WS5-OR08 E. Meloni (UNISA) <i>Soot abatement from biomass boilers by means of open-cell foams filters</i>
16.15-16.30	WS5-OR09 E. Paone (UNIFI) <i>Transfer hydrogenation of alkyl levulinates promoted by a ZrO<sub>2</sub> catalyst: a comparison of batch vs continuous gas-flow conditions</i>



16.30-16.45	WS5-OR10 <i>D. Bonincontro (UNIBO)</i> <i>Nanosized NiO supported Au-based NPs for the base-free HMF oxidation</i>
16.45-17.00	WS5-OR11 <i>R. Esposito (UNINA)</i> <i>Transesterification of levulinic acid catalyzed by a <math>\mu</math>-oxo-dinuclear iron(III) salen complex</i>
17.00-17.15	WS5-OR12 <i>M. Ricciardi (UNISA)</i> <i>Catalytic conversion of bio-glycidol into value-added products</i>
17.15-17.30	WS5-OR13 <i>J. De Maron (UNIBO)</i> <i>Innovative bifunctional catalytic system for methyl methacrylate synthesis: the peculiar role of gallium</i>

17:30-19:00	<b>Poster Session of WS5</b>
WS5 PO01-	<i>Giulia Balestra, Stefania Solmi, Tommaso Tabanelli, Fabrizio Cavani</i> <i>“Sustainable bio-products: study of the catalytic hydrogenation of 5-(hydroxymethyl)furfural”</i>
WS5 PO02-	<i>Federico Bella, Lucia Fagiolari, Claudio Gerbaldi</i> <i>“Ambient condition fabrication of perovskite solar cells: towards industrial approaches”</i>
WS5 PO03-	<i>Alice Cappitti, Antonella Salvini, Alessandra Papacchini, Donatella Giomi, Brunella Perito</i> <i>“Synthesis, characterization and application study of nanocomposites”</i>
WS5 PO04-	<i>Silvia Giorgi, Fabio Chiozza, Fabrizio Bernardini, Antonella Salvini</i> <i>“Crosslinkers for polyvinyl alcohol-based formulations”</i>
WS5 PO05-	<i>Simone Maranghi, Maria Laura Parisi, Riccardo Basosi, Adalgisa Sinicropi</i> <i>“Methodologies for the sustainability evaluation of novel chemical products for innovative renewable energy technologies”</i>
WS5 PO06-	<i>Nicole Mariotti, Matteo Bonomo, Marco Zanetti, Gabriele Ricchiardi, Marcello Baricc, Claudia Barolo</i> <i>“Increasing sustainability of materials for renewable energy”</i>
WS5 PO07-	<i>Eugenio Meloni, Bruno Rossomando, Ivan Arsie, Cesare Pianese, Vincenzo Palma</i> <i>“Regeneration tests of a catalytic DPF at the exhaust of a common-rail diesel engine”</i>
WS5 PO08-	<i>Raffaella Mancuso, Rossana Miliè, Ida Zicarelli, Bartolo Gabriele</i> <i>“Carbonylative Regio- and Stereoselective Synthesis of (Z)-2-(2-Oxopyrrolidin-3-ylidene)acetates”</i>
WS5 PO09-	<i>Maria Ricciardi, Raffaele Cucciniello, Francesco Della Monica, Carmine Capacchione, Antonio Proto</i> <i>“A new [OSSO]-Fe(III) triflate complex as catalyst for the regioselective ring opening of glycidol to monoalkyl glyceryl ethers”</i>
WS5 PO10-	<i>Maria Ricciardi, Raffaele Cucciniello, Daniele Cespi, Fabrizio Passarini, Joel Barrault, Carmine Capacchione, Antonio Proto</i> <i>“Production of value-added chemicals starting from glycidol as green feedstock”</i>
WS5 PO11-	<i>Carmelina Rossano, Vincenzo Russo, Rosa Vitiello, Rosa Turco, Riccardo Tesser, Martino Di Serio</i> <i>“Kinetics of the Amberlite IR-120 catalyzed acid esterification of ethanol with levulinic acid”</i>
WS5 PO12-	<i>Vincenzo Russo, Ferdinando de Luca Bossa, Riccardo Tesser, Maria Oliviero, Martino Di Serio, Letizia Verdolotti</i> <i>“Bio-based Rigid Polyurethane foams from renewable resources”</i>
WS5 PO13-	<i>Annalisa Sacchetti, Irene Tosi, Tommaso Tabanelli, Fabrizio Cavani, Anders Riisager</i> <i>“Effect of mesoporous zeolites for the selective conversion of carbohydrates into methyl lactate”</i>
WS5 PO14-	<i>Antonella Salvini, Alessandra Papacchini, Alice Cappitti, Donatella Giomi</i> <i>“Production of green polymeric formulations from natural and renewable sources”</i>

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<p>WS5 PO15- <u>Michela Signoretto</u>, <u>Elena Ghedini</u>, <u>Federica Menegazzo</u>, <u>Pietro Riello</u>, <u>Silvia Tabasso</u>, <u>Giorgio Grillo</u>, <u>Giancarlo Cravotto</u>  <i>“Hi-tech cosmetics by cocoa and black tea extracts: a valuable synergy of technologies to transform waste in high value products”</i></p>
<p>WS5 PO16- <u>Tommaso Tabanelli</u>, <u>Carlo Giliberti</u>, <u>Rita Mazzoni</u>, <u>Raffaele Cucciniello</u>, <u>Fabrizio Cavani</u>  <i>“Glycerol carbonate as an innovative alkylating agent for phenolics”</i></p>
<p>WS5 PO17- <u>Riccardo Tesser</u>, <u>Rosa Turco</u>, <u>Vincenzo Russo</u>, <u>Rosa Vitiello</u>, <u>Martino Di Serio</u>  <i>“Bio-lubricants Synthesis from the Epoxidized Oil promoted by Clays: Kinetic modelling”</i></p>
<p>WS5 PO18- <u>Sebastiano Tieuli</u>, <u>Michela Signoretto</u>, <u>Federica Menegazzo</u>, <u>Riccardo Pasquale</u>, <u>Massimiliano Silvestri</u>  <i>“GOAST”- Green Organic Agents for Sustainable Tanneries”</i></p>
<p>WS5 PO19- <u>Rosa Turco</u>, <u>Martino Di Serio</u>, <u>Riccardo Tesser</u>, <u>Massimo Fagnano</u>, <u>Mario Malinconico</u>, <u>Salvatore Mallardo</u>, <u>Gabriella Santagata</u>  <i>“Evaluation of Cynara Cardunculus Biomass Recovery as an Eco-Sustainable Resource for Bioplastics Bioplasticizers”</i></p>
<p>WS5 PO20- <u>Rosa Vitiello</u>, <u>Vincenzo Russo</u>, <u>Rosa Turco</u>, <u>Francesco Taddeo</u>, <u>Riccardo Tesser</u>, <u>Antonio Buonerba</u>, <u>Alfonso Grassi</u>, <u>Martino Di Serio</u>  <i>“Sustainable base-lubricant synthesis using heterogeneous catalysts”</i></p>
<p>WS5 PO21- <u>Dafne Cimino</u>, <u>Francesco Enrichi</u>, <u>Elti Cattaruzza</u>, <u>Giancarlo Gasparotto</u>, <u>Alberto Sozza</u>, <u>Enrico Trave</u>, <u>Elisabetta Zendri</u>  <i>“Testing hybrid coatings as protective solutions for outdoor lighting systems to be exported to the Middle-East: an effective factory-university collaboration within the TEMART project”</i></p>
<p>WS5 PO22- <u>Maria Grimaldi</u>, <u>Antonella Cavazza</u>, <u>Claudio Corradini</u>  <i>“Innovative material from agro alimentary by-products to realize a spray active packaging in a context of sustainability and Circular Economy”</i></p>
<p>WS5 PO23- <u>Melissa Greta Galloni</u>, <u>Sebastiano Campisi</u>, <u>Michele Ferri</u>, <u>Antonella Gervasini</u>  <i>“The “virtuous life-cycle of hydroxyapatite”: from removal of heavy metals in polluted wastewaters to new ecofriendly catalysts for air-quality protection”</i></p>

	<b>Grand Hotel Salerno</b>
20:00-22:30	Conference Dinner

## WS6 – ENERGY FOR MOBILITY

Friday, August 30<sup>th</sup> 2019

<i>Centro Congressi Grand Hotel Salerno</i>	
<b>WS6 – Energy for Mobility</b>	
<i>Chairperson: Christian Durante</i>	
8:30 – 8:55	<i>Get together - Opening of W6 A. Blume, C. Durante, M. Galimberti, P. Zalar</i>
8:55-9:20	<i>WS6 OR01 – Antonino Salvatore Aricò (ITAE) Fuel cells and sustainable hydrogen production for automotive application</i>
9:20-9:45	<i>WS6 OR02 – <u>Raimondo Hippoliti</u> (FIAAM), Matteo Boggian, Stefano Bastianello, Nicola Bortolamei Electric Mobility: an overview about the rising transition from Lead Acid to Li-ion battery technology</i>
<b>WS6 – Sustainable Mobility</b>	
<i>Chairperson: Anke Blume</i>	
9:45-10:10	<i>WS6 OR03 – Attilio Citterio (Politecnico Milano) Chemistry and Materials for sustainable mobility: strategy and perspectives</i>
10:10-10:35	<i>WS6 OR04 – <u>Fabian Grunert</u> (University of Twente), Andries van Swaaij, Anke Blume How to meet the future mobility requirements of the automotive industry?</i>
10:10-10:35	<i>WS6 OR05 – Thomas Hanell (Pirelli) Material trends for the tire of the future</i>
11:00-11:30	Coffee break
<i>Chairperson: Maurizio Galimberti</i>	
11:30-11:55	<i>WS6 OR06 – C. Yamada, M. Sato, Amnuwa Beraheng, Kannika Sahakaro, Wilma K. Dierkes, Jacques W.M. Noordermeer, <u>Anke Blume</u> (University of Twente) New approaches to reduce the CO<sub>2</sub> emission of a passenger car by introducing innovative materials</i>
11:55-12:20	<i>WS6 OR07 – Marika Falciano (FCA) New materials for future mobility: the automotive sector involvement</i>
12:20-12:45	<i>WS6 OR08 – <u>Gianluca Casagrande</u> (Dow), Sabrina Fregni (Dow) Innovative polyurethane foams solutions to improve engine efficiency and total weight reduction while enhancing vehicle driver's comfort and safety</i>
12:45-14:10	Break and Poster view
<b>WS6 – Sustainable Mobility</b>	
<i>Chairperson: Maurizio Galimberti</i>	
14:10-14:35	<i>WS6 OR09 – Ulrich Giese (DIK) Improvement of tire materials concerning light weight, permeability and rolling resistance using high effective filler systems</i>
14:35-15:00	<i>WS6 OR10 – Michele Grazzi (LyondellBasell) Advanced Product Performance to meet Light Weight Requirement for Transportation Segment</i>
15:00-15:25	<i>WS6 OR11 – <u>Gianpiero Mastinu</u> (Politecnico Milano), Giorgio Previati, Vincenzina Barbera, Maurizio Galimberti Light weight materials for sustainable mobility: nanofillers and design</i>
15:25-15:50	<i>WS6 OR12 – <u>Gianluca Casagrande</u> (Dow), Sabrina Fregni Cabin air quality improvement by low emission, aldehyde abatement and enhanced durability of new generation Polyurethane Interior Foams</i>

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<i>Break</i>	
16:05-16:30	<i>WS6 OR13 – Franco Fattorini (EPTANova), Paolo Giaccone Printing and painting industries: processes and products for sustainable mobility</i>
<b>WS6 – Smart Mobility</b>	
<i>Chairperson: Peter Zalar</i>	
16:30-16:55	<i>WS6 OR14 – Mario Caironi (IIT) Printed Organic Electronics Solutions for Smart Electronic Systems</i>
16:55-17:20	<i>WS6 OR15 – Miguel Ribeiro (CeNTI), N. Durães, S. Silva, D. Esteves, J. Gomes Development of nano and micro structured smart fibre devices</i>
17:20-17:45	<i>WS6 OR16 – Peter Zalar (Holst Centre / TNO) Applied Conformable Printable Sensor Systems</i>

17:45-19:00	<b>Poster Session of WS6</b>
	<i>WS6 PO01 – Valerio Margiotta, Maria Cecilia Palumbi, Giancarlo Cossu, Paolo Straffi, Angela Agostiano, M. Lucia Curri, <u>Roberto Comparelli</u> (IPCF-CNR) New multifunctional cross-linking promoters in curing process for tyre applications</i>
	<i>WS6 PO02 – <u>Marika Falciano</u> Vito Guido Lambertini, Paolo Chiappero, Marco Zanetti, Valentina Brunella (FCA) Eco-sustainable elastomeric materials for the automotive sector</i>
	<i>WS6 PO03 – <u>Gea Prioglio</u>, Silvia Agnelli, Winoj Balasooriya, Bernd Schritteser, Lucia Conzatti, Daniele Locatelli, Vincenzina Barbera, Maurizio Galimberti (Politecnico Milano) Sustainable materials for tyres. 1. Natural rubber compounds with better mechanical properties thanks to functionalized nanosized graphite</i>
	<i>WS6 PO04 – <u>Daniele Locatelli</u> Valeria Cipolletti, Giulia Peli, Luca Giannini, Vincenzina Barbera, Maurizio Galimberti (Politecnico Milano) Sustainable materials for tyres. 2. High aspect ratio natural fillers for rubber compounds with low dissipation of energy</i>
	<i>WS6 PO05 – <u>Fatima Margani</u>, Vincenzina Barbera, Daniele Locatelli, Valeria Cipolletti, Maurizio Galimberti (Politecnico Milano) Sustainable materials for tyres. 3. Biobased secondary accelerators for silica based compounds</i>
	<i>WS6 PO06 – <u>Lucia Rubino</u>, Martina Magrograssi, Vincenzina Barbera, Maurizio Galimberti (Politecnico Milano) Sustainable isocyanate-free polyurethanes</i>

19:00	<b>Closing</b>
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## WS7 – PLASTICS AND ENVIRONMENT

Thursday, August 29<sup>th</sup> 2019

<i>Centro Congressi Grand Hotel Salerno</i>	
<i>Conveners: Daniele Caretti, Markus Gahleitner</i>	
<i>Chairperson: Gaetano Guerra</i>	
9:00-9:45	<i>WS7 IL01 – Michael A. R. Meier Renewability is not Enough: Sustainable Synthesis of Biomass-derived Monomers and Polymers</i>
9:45-10:15	<i>WS7 KN01 – Giampaolo Pellegatti How the innovative talent bridges polymerization technology, sustainable trends and customer needs</i>
10:15-10:45	<i>WS7 KN02 – Antonio Protopapa The new challenges in the recycling of plastic packaging</i>
10:45-11:00	<i>WS7 OR01 – Emilia Garofalo, Luciano Di Maio, Paola Scarfato, Antonio Protopapa, Loredana Incarnato Recycling of post-consumer flexible plastic films: a nanotechnology strategy to upgrade the material's properties</i>
11:00-11:30	Coffee break
<i>Chairperson: Eugenio Longo</i>	
11:30-12:00	<i>WS7 KN03 – Armando Galeotti Different ways to close the circularity loop: the perspective of a polymer producing chemical company</i>
12:00-12:15	<i>WS7 OR02 - Haroutioun Askanian, Nicola Schiavone, Sophie Commereuc, Vincent Verney Additive manufacturing and green polymer materials</i>
12:15-12:30	<i>WS7 OR03 – Mariacristina Cocca, Francesca De Falco, Emilia Di Pace, Roberto Avolio, Maria Emanuela Errico, Gennaro Gentile, Maurizio Avella Microplastic Pollution: Sources, Quantitative Evaluation and Mitigation Strategies</i>
12:30-12:45	<i>WS7 OR04 – Valter Castelvetro, Tarita Biver, Alessio Ceccarini, Mario Cifelli, Andrea Corti, Valentina Domenici, Stefania Giannarelli, Jacopo La Nasa, Tommaso Lomonaco, Enrico Manco, Francesca Modugno, Virginia Vinciguerra Tackling the present and future challenges for micro- and nanoplastics quantification and removal from polluted water bodies and related environmental matrices</i>
12:45-13:00	<i>WS7 OR05 – Enrico Carmeli, Davide Tranchida, Dario Cavallo Application of thermal fractionation analysis for recycled polyolefin grades characterization</i>
13:00-15:00	Break and Poster view
<i>Chairperson: Antonio Protopapa</i>	
15:00-15:45	<i>WS7 IL02 – Alexandra Alburnia, Markus Gahleitner, Susanne Kahlen Polyolefin solutions for a sustainable future</i>
15:45-16:15	<i>WS7 KN04 – Vincent Verney Green plastics degradation and circular economy</i>
16:15-16:30	<i>WS7 OR06 – Federico Bella, Francesca Colò, Giulia Piana, Marisa Falco, Elisa Maruccia, Gabriele Lingua, Lucia Fagiolari, Giuseppina Meligrana, Claudio Gerbaldi Sustainable Matrices and Polymerization Processes for Post-Lithium Batteries</i>

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16:30-16:45	WS7 OR07 – <i>Carla Marega</i> <i>Effect of the collector on the mechanical properties of biodegradable and biocompatible PHB@MWCNTs electrospun fibers</i>
16:45-17:00	WS7 OR08– <i>Seif Eddine Fenni, Nacerddine Haddaoui, Orietta Monticelli, Dario Cavallo</i> <i>Renewable and tough poly (L-lactic acid)/polyurethane blend prepared by dynamic vulcanization</i>
17:00-17:15	WS7 OR09 – <i>Raffaella Ferraioli, Luciano Di Maio, Paola Scarfato, Loredana Incarnato</i> <i>Valorization of pulper waste composites reinforced with basalt fiber</i>
17:15-17:30	<i>Final discussion and questions</i>

17:30-19:00	<b>Poster Session of WS7</b>
WS7 PO01-	<i>Miriam Hubera, Vasiliki-Maria Archodoulaki, Markus Gahleitner</i> <i>Microplastics in aquatic ecosystems: How comparable are literature data?</i>
WS7 PO02-	<i>Pierangiola Bracco, Federica Spina, Chiara Arcolin, G. Cristina Varese, Marco Zanetti</i> <i>Biodegradation of polyethylene by selected fungal strains</i>
WS7 PO03-	<i>Enrico Manco, Tarita Biver, Valter Castelvetro, Andrea Corti, Alessio Ceccarini, Tommaso Lomonaco.</i> <i>Poly(styrene) and polyolefin micro- and nanoplastics in sandy beach sediments: selective polymer quantification by GPC/fluorescence, and investigation on low MW environmental degradation by-products</i>
WS7 PO04-	<i>Virginia Vinciguerra, Valter Castelvetro, Alessio Ceccarini, Andrea Corti, Antonella Petri</i> <i>PET microfibers as ubiquitous pollutants of waters? A first sensitive and accurate method for their quantification in environmental matrices</i>
WS7 PO05-	<i>Maria Voccia, Laura Falivene, Lucia Caporaso</i> <i>Control of chain walking by tailoring the strength of neighboring group interactions switches polymerization to dimerization catalysis</i>
WS7 PO06-	<i>Manohar Golla, Nagendra Baku, Christophe Daniel, Gaetano Guerra, Paola Rizzo</i> <i>Nanoporous Crystalline forms of Poly(2,6-dimethyl-1,4-phenylene) for Removal of Pollutants from the Environment</i>
WS7 PO07-	<i>Stefania Zappia, William Porzio, Silvia Destri, Guido Scavia, Monica Panigati, Luminita Marin, Brindusa Dragoi, Elena Perju, Adina Coroaba, Massimo Marcaccio</i> <i>CO2 capture and sequestration by organic polymeric derivatives: two different approaches</i>
WS7 PO08-	<i>Odda Ruiz de Ballesteros, Claudio De Rosa, Finizia Auriemma, Rocco Di Girolamo</i> <i>Isotactic 1-Butene-Ethylene Copolymers from Ziegler-Natta catalysis: Correlation between Microstructure and Formation of the Trigonal Form I</i>
WS7 PO09-	<i>Vincent Verney</i> <i>Circular Economy of plastic multilayer packaging: H2020 Terminus project</i>
WS7 PO10-	<i>Babacar Niang, Nicola Schiavone, Haroutioun Askanian, Diène Ndiaye, Vincent Verney</i> <i>Effects of wood stem powder content on the morphological, rheological and thermomechanical properties of PLA matrix biocomposites</i>
WS7 PO11-	<i>Vissia Vitale, Antonio Vecchione, Roberto Pantani, Riccardo Bianchi, Giuseppe Milano, Gaetano Guerra, Sandro Del Giudice</i> <i>Optimization of PET grades and processing conditions for a lighter mineral water packaging</i>

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*WS7 PO12-Francesco Prandi, Luca Guerrini, Stefano Cerini, Letterio Giannino, Daniele Caretti, Giovanni Mazzotti, Fiorenzo Parrinello, Fabrizio Pucci, Valentina Fiumi, Chiara Gualandi, Eugenia Sveva Stancari, Maurizio Fiorini*  
*Low molecular weight compounds in polyolefins: a comparative study of different analytical techniques and processing conditions*

	<b><i>Grand Hotel Salerno</i></b>
20:00-22:30	<i>Conference Dinner</i>

## WS8 - SMART MATERIALS

Friday, August 30<sup>th</sup> 2019

<b>Centro Congressi Grand Hotel Salerno</b>	
<i>Chairperson: Prof. Giuseppe Mensitieri</i>	
9:00-9:40	WS8 KN01 – R. Zbořil <i>Low-dimensional carbon nanostructures for biomedical, magnetic, and environmental technologies</i>
9:40-10:10	WS8 KN02 – S. Marchesan <i>Nanostructured materials for selective chemical separation and advanced diagnostics</i>
10:10-10:25	WS8 OR01 – G. V. Bianco, M. Grande, A. Sacchetti, P. Capezzuto, M. Scalora, G. Bruno <i>Graphene technological applications: chemical strategies to overcome limitations</i>
10:25-10:45	WS8 OR02 – P. L. Gentili <i>Smart materials at the service of artificial intelligence</i>
10:45-11:00	WS8 OR03 – M. Melchionna, S. Marchesan, C. Tavagnacco, M. Bevilacqua, M. Bonchio, A. Khlobistov, D. Bonifazi, G. Valenti, F. Paolucci, P. Fornasiero, M. Prato <i>Smart electro-and photo-catalysts based on nano-carbon hybrids</i>
11:00-11:30	Coffee break
<i>Chairperson: Prof. Silvia Farè</i>	
11:30-12:00	WS8 KN03 – P. Vacca <i>Functional composites for advanced packaging solutions</i>
12:00 –12:15	WS8 OR04 – S. Zuppolini, L. Baldino, E. Reverchon, L. Nicolais, A. Borriello <i>Superabsorbent Aerogels Technology Platform</i>
12:15-12:30	WS8 OR05 – L. Melone, A. Fiorati, L. Riva, N. Pastori, C. Punta <i>Functional materials from nanocellulose</i>
12:30–12:45	WS8 OR06 – R. Romita, V. Rizzi, J. Gubitos, J.A. Gabaldón, M. I. Fortea Gorbe, V. M. Gómez López, P.Fini, P. Cosma <i>Cyclodextrin-based polymers as efficient and reusable adsorbents to remove emerging pollutants from water to promote a sustainable and circular economy</i>
12:45-13:00	WS8 OR07 – F. Nardelli, F. Martini, E. Rossi, M. Geppi, L. Calucci, S. Borsacchi, M. Cettolin, A. Susanna, E. Carignani <i>Structural and dynamic characterization of elastomeric materials by time domain NMR spectroscopy</i>
13:00-15:00	Break and Poster view
<i>Chairperson: Luigi De Nardo</i>	
15.00-15:25	WS8 OR08 (Invited Lecture) – G. Vozzi <i>Tailoring materials properties from nano to microscale</i>
15:25-15:50	WS8 OR09 (Invited Lecture) – S. Farè, L. Bonetti, N. Contessi Negrini, L. De Nardo <i>Smart natural hydrogels for biomedical applications</i>
15:50-16:05	WS8 OR10 – M. L. Curri, E. Fanizza, M. Striccoli, R. Comparelli, C. Ingrosso, A. Panniello, T. Placido, M. Corricelli, F. Rizzi, F. Vischi, A. Agostiano, N. Depalo <i>Smart multifunctional nanomaterials based on colloidal nanoparticles for biomedical applications</i>
16:05-16:20	WS8 OR11 – P. Dardano, L. de Stefano, L. Nicolais <i>Polymeric microneedles based devices: from material design to application</i>



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16:20-16:35	WS8 OR12 – <u>B. Grandinetti</u> , <u>S. Querceto</u> , <u>D. Martella</u> , <u>C. Ferrantini</u> , <u>J. M. Pioner</u> , <u>D. S. Wiersma</u> , <u>C. Poggesi</u> , <u>C. Parmeggiani</u> <i>Stimuli-responsive materials towards biological applications</i>
16:35-16:50	WS8 OR13 – <u>A. Ronca</u> , <u>G. Rollo</u> , <u>P. Cerruti</u> , <u>G. Fei</u> , <u>X. Gan</u> , <u>G. G. Buonocore</u> , <u>M. Lavoragna</u> , <u>H. Xia</u> , <u>C. Silvestre</u> , <u>L. Ambrosio</u> <i>Selective laser sintering fabricated thermoplastic polyurethane/graphene cellular structures with tailorable properties and high strain sensitivity</i>
16:50-17:05	WS8 OR14 – <u>E. Di Maio</u> , <u>F. Errichiello</u> , <u>A. Cammarano</u> , <u>M. Trofa</u> , <u>P. L. Maffettone</u> , <u>L. Nicolais</u> <i>Simply advanced foams</i>
17:05-17:20	WS8 OR15 – <u>V. C. L. Caruso</u> , <u>R. Inturri</u> , <u>V. Sanfilippo</u> , <u>G. Villaggio</u> , <u>L. Messina</u> , <u>S. Vaccaro</u> , <u>C. Satriano</u> <i>Gold nanoparticles and hyaluronic acid hybrids for enhanced wound healing properties</i>

17:30-19:00	<b>Poster Session of WS8</b>
WS8 PO01	<u>C. Amicucci</u> , <u>M. Banchelli</u> , <u>C. D'Andrea</u> , <u>M. de Angelis</u> , <u>F. Cristiano</u> , <u>F. Bertocchi</u> , <u>A. Caneschi</u> , <u>P. Matteini</u> <i>Formulation of hybrid nanocomposites based on silver nanowires and graphene derivatives for the fabrication of SERS substrates</i>
WS8 PO02	<u>A. Bellissimo</u> , <u>F. Auriemma</u> , <u>R. Pasquino</u> , <u>N. Grizzuti</u> , <u>C. De Rosa</u> <i>Dynamics and structure of Polyvinyl alcohol chains at the interface of two surfaces</i>
WS8 PO03	<u>A. Caneschi</u> , <u>M. Innocenti</u> , <u>M. Briganti</u> , <u>L. Capozzoli</u> , <u>A. Cini</u> , <u>E. Fantechi</u> . <i>PVD thin films deposited study for applications in the luxury industry</i>
WS8 PO04	<u>A. Cozzolino</u> , <u>N. Baku</u> , <u>P. Rizzo</u> , <u>G. Guerra</u> , <u>Anna Nuzzo</u> , <u>Paolo Vacca</u> <i>A New Crystalline Polymer: Poly(2,6-dimethyl-1,4-phenylene)oxide (PPO)</i>
WS8 PO05	<u>M. Gastaldi</u> , <u>A. Fin</u> , <u>N. Barbero</u> , <u>I. Roppolo</u> , <u>A. Chiappone</u> , <u>F. Frascella</u> , <u>S. Bordiga</u> , <u>M. Zanetti</u> , <u>Claudia Barolo</u> <i>Innovative functional polymers in the 3D printing</i>
WS8 PO06	<u>T. Mecca</u> , <u>F. Cunsolo</u> , <u>D. Caretti</u> , <u>S. Scurti</u> , <u>M. Ussia</u> , <u>S. C. Carroccio</u> <i>New glucamine based highly porous polymers for the adsorption of arsenic from water</i>
WS8 PO07	<u>W. Navarra</u> , <u>O. Sacco</u> , <u>V. Vaiano</u> , <u>C. Daniel</u> , <u>V. Venditto</u> <i>Nanocomposite aerogels with photocatalytic properties as smart materials for environmental application</i>
WS8 PO08	<u>F. Rizzi</u> , <u>T. Latronico</u> , <u>A. Panniello</u> , <u>V. Laquintana</u> , <u>N. Denora</u> , <u>I. Arduino</u> , <u>A. Fasano</u> , <u>C. M. Mastroianni</u> , <u>E. Fanizza</u> , <u>M. P. Scavo</u> , <u>M. Striccoli</u> , <u>A. Agostiano</u> , <u>G.M. Liuzzi</u> , <u>M. L. Curri</u> , <u>N. Depalo</u> <i>Luminescent PLGA-based nanoparticles as traceable nanocarriers for darunavir brain delivery to treat HIV-associated disorders</i>
WS8 PO09	<u>F. Vischio</u> , <u>N. Depalo</u> , <u>R. M. Iacobazzi</u> , <u>M. P. Scavo</u> , <u>S. Villa</u> , <u>F. Canepa</u> , <u>S. Hee Lee</u> , <u>B. Chul Lee</u> , <u>E. Fanizza</u> , <u>I. Arduino</u> , <u>V. Laquintana</u> , <u>A. Lopalco</u> , <u>A. Lopedota</u> , <u>A. Cutrignelli</u> , <u>M. Striccoli</u> , <u>A. Agostiano</u> , <u>N. Denora</u> , <u>M. L. Curri</u> <i>Magnetically targeted delivery of sorafenib through magnetic solid lipid nanoparticles towards treatment of hepatocellular carcinoma</i>
WS8 PO10	<u>M. Milazzo</u> , <u>F. Auriemma</u> , <u>C. De Rosa</u> , <u>D. Capone</u> , <u>R. Pasquino</u> , <u>N. Grizzuti</u> <i>Evaluation of curing efficiency of novolac-type phenol-formaldehyde resins for the tuning of multifunctional materials</i>
WS8 PO11	<u>L. Izzo</u> , <u>M. Mella</u> , <u>G. Vigliotta</u>

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<i>How to modulate the inherent antimicrobial activity of thermoplastic polymers based on 2-(Dimethylamino)Ethyl Methacrylate: the role of polymer architecture</i>	
WS8 PO12 M. Giorcelli, P. Mandracci, S. Guastella, X. Li, Y. Liang, A. Tagliaferro <i>Plasma treatments to improve carbon fibers adhesion on epoxy resin composites</i>	
WS8 PO13 S. Cicchi, B. Richichi, M. Mba Blázquez, T. Carofiglio, E. Menna, M. Maggini <i>WeGoNANO: multifunctional nanostructured carbon and glycans derivatives for industrial applications</i>	
WS8 PO14 L. M. Cucci, S. Kwiek, L. Finocchiaro, I. Pinieri, C. Satriano <i>Silica nanoparticles for controlled loading and release of essential oils in multifaceted patches</i>	
WS8 PO15 K. Fidecka, D. Williams, I. Yildirim, W. Kamau, S. Mathur, S. Porzio E. Licandro <i>Application of academic research on halloysite nanoparticles in the development of BASF's halloysite-based products</i>	
WS8 PO16 A. Trusek <i>Graphene Oxide as a drug carrier – chemical carrier activation, drug attachment and its enzymatic release</i>	
WS8 PO17 B. Oji and M. Sadiq <i>Sintering, Characterization and Physical Properties Evaluation of Ceramics Produced From Soda-Lime-Silica Glass and White Corn Cob Ash</i>	
19:00-19:15	<b>Closing</b>