

# EIT RawMaterials Winter School

## “Waste Electrical and Electronic Equipment”

**26<sup>th</sup> - 30<sup>th</sup> October 2020**

**Time: 15.00 - 17.00**

**On-line event: CONNECT®**

The EIT RawMaterials is a platform for innovation funded by the European Institute of Innovation and Technology (EIT). The EIT has created the so-called KIC - Knowledge Innovation Communities, communities that aim to promote innovation and education in Europe in crucial sectors, supporting entrepreneurship and enhancing the passage of new ideas from the incubation phase to the market. The EIT RawMaterials is particularly committed to addressing the global challenge of supplying raw materials in Europe through programs and projects that aim to develop technology throughout the entire value chain of raw materials: from the exploration of resources, to the mining industry, from metallurgical processes to the replacement of critical or toxic raw materials, from the recycling of end-of-life product materials to the design of products for the circular economy.

As part of regional development programs, the EIT RawMaterials has created a Hub in the Puglia Region (Regional Center Southern Italy - RCSI), coordinated by ENEA and participated by CNR, in order to increase the involvement of the local ecosystems in the activities of KIC and its partnership.

The Strategic Agenda of the Hub - RCSI includes specific initiatives such as research and innovation, training and education, and finally business support. This EIT RawMaterials Winter School will be organised in the framework of the RCSI, for training and educating Bachelor and Master students as well as PhDs. The aim of the 5 virtual seminars is to improve knowledge on the Circular Economy and its innovative models, applied to the whole supply chain of Waste Electrical and Electronic Equipment (WEEE), in order to improve the recovery of materials and suggest improvements towards closing the loop. Expert academics, researchers and professionals will provide a deep overview of the state of the art of the WEEE supply chain and possible innovation steps towards sustainability.

### Agenda Winter School

26<sup>th</sup> October 2020, h 15:00 - 17:00

**"WEEE management cycle: which contribute to the Circular Economy perspective?"**

*Prof. Renato Passaro* - Università degli Studi di Napoli Parthenope, Naples

27<sup>th</sup> October 2020, h 15:00 - 17:00

**"Electric and Electronic Waste: Assessing the Environmental Benefits from Circular Management"**

*Prof. Sergio Ulgiati* - Università degli Studi di Napoli Parthenope, Naples

28<sup>th</sup> October 2020, h 15:00 - 17:00

**"The InnoWEEE project and the ReSiELP project: two successful examples of technological solutions in support of The Circular Economy"**

*Ing. Marco Tammaro* - ENEA, Portici Research Center

29<sup>th</sup> October 2020, h 15:00 - 17:00

**"Recovery of materials from End-of-Life PV Panels in a Life Cycle Assessment perspective"**

*Dr. Gabriella Fiorentino and Dr. Amalia Zucaro* - ENEA, Portici Research Center

30<sup>th</sup> October 2020, h 15:00 - 17:00

**"Circular Economy, recycling, refurbishment and remanufacturing: Towards Sustainable Business Models"**

*Dr. Luca Fasolino* (Consorzio Ecoem) and *Ing. Luca Pucci* (Legambiente Campania)

#### Further Information

The participation is free of charge. After registration the participants will receive a link CONNECT to follow online the scheduled events.

#### Registration

The free of charge registration should be applied to link:

[https://www.lyyti.fi/reg/EIT\\_RawMaterials\\_Winter\\_School\\_Waste\\_Electrical\\_and\\_Electronic\\_Equipment\\_9214](https://www.lyyti.fi/reg/EIT_RawMaterials_Winter_School_Waste_Electrical_and_Electronic_Equipment_9214)

#### Language

English is the official language. The presentation slides will be in English, **but they will be commented in native language (Italian) of the RCSI area.**

#### Contact

Email: [info@eitrawmaterials-rcsi.eu](mailto:info@eitrawmaterials-rcsi.eu) - Website: [www.eitrawmaterials-rcsi.eu](http://www.eitrawmaterials-rcsi.eu)

**RCSI Coordinator:** Dr. Michele Penza - [michele.penza@enea.it](mailto:michele.penza@enea.it)

#### Organized by:



#### Supported by:



#### Collaborated by:



## Short CV of the Winter School speakers



### **Prof. Renato Passaro**

Renato teaches Supply Chain Management and Innovation Management at Department of Engineering of the University of Naples Parthenope (UNP). Has taught at the Universities of Lecce, Parma, Naples Federico II and coordinated several research projects at National Research Council. Director of the Department of Technology and Director of Master in Supply Chain Management at UNP.

Main research interests include sustainable supply chain management, reverse supply chain, entrepreneurship & startup, small business management. He is part of EU-funded research projects teams focused on circular economy. Renato is author or co-author of more than 150 national and international publications and collaborate with national and international journals as editorial board member and reviewer.



### **Prof. Sergio Ulgiati**

Professor of Environmental Chemistry and Life Cycle Assessment at the Department of Science and Technology of Parthenope University of Napoli. Contract professor at School of Environment, Beijing Normal University. Expertise in Energy Analysis, Life Cycle Assessment, Environmental Accounting, circular economy and technology. More than 300 papers published in National and International Journals and Books. Member of the Editorial Boards of Energy, Ecological Modelling, Energies, Environment Development and Sustainability, Journal Cleaner Production, Frontiers in Sustainable Cities. Chief co-Editor of the Journal of Environmental Accounting and Management.

Organizer and Chair of the Biennial International Workshop "Advances in Energy Studies" (9 editions already held since 1998) as well as the Biennial International Energy Research Conference (11th Editions since 1999). Founder and Coordinator of the China-Italy Cooperation Network "Matteo Ricci".



### **Ing. Marco Tammaro**

He is Responsible of Laboratory Technologies for the Reuse, Recycling, Recovery and valorisation of Waste and Materials (T4RM) of ENEA.

He received his doctoral degree and the degree in chemical engineering from the University "Federico" of Naples (Italy), in 2010 and 1997, respectively.

In 1999 he began working as a researcher at the C.R. ENEA of Trisaia (MT), where it is responsible for the activity of semi-industrial scale plants for both urban and special waste treatment.

Since 1999, he is a researcher at ENEA, Italian National Agency for New Technologies, Energy and Sustainable Economic Development. Since 2004 he works in research Centre of Portici at Naples (Italy). His main research interests are in Circular Economy. In particular: study of

environmental impact of anthropic activities and sustainable management of photovoltaic waste.

He is scientific manager for ENEA of different international projects. He has supervised several degree theses. He is also peer review of scientific journals, and chairman in international conference sessions. He is author of several scientific papers published in the proceedings of international conference and journals.



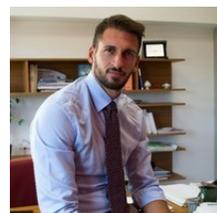
#### **Dr. Gabriella Fiorentino**

Researcher at ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), Department for Sustainability, Division Resource Efficiency. Graduated with honours in Environmental Science at the University of Naples Parthenope in 2002, she obtained the title of PhD in “Valorisation and Management of Agro-forestry Resources” at the University of Naples Federico II in 2006. Her main research interests include valorisation and sustainable use of resources, from different perspectives. The first approach concerned the valorisation of natural resources and waste materials through laboratory-scale experiments, to move, in recent years, towards a broader vision through a holistic-type approach such as that of Life Cycle Thinking and the development of Circular Economy models. Wide experience in international research projects and in the supervision of undergraduates and PhD students.



#### **Dr. Amalia Zucaro**

She is researcher at ENEA, Italian National Agency for New Technologies, Energy and Sustainable Economic Development. In 2004, she graduated cum laude in Environmental Sciences and, in 2011, she achieved the title of PhD in “Environment, Resources and Sustainable Development”. Her main research interests focused on renewable energy sources, bioenergy and energy related issues, biomass conversions, energy use in agriculture and industrial sector, life cycle assessment (LCA), multi-criteria environmental assessment, Environmental Accounting, Energy Synthesis, Sustainability indicators, Multi-Criteria Environmental Assessment. All her professional experiences have a unique *leitmotiv* concerning a specific approach to the sustainable development of different areas of interest through multi-method evaluation. She has wide experience in international (FP6, FP7, H2020, MAECI, EIT KIC-Climate, EIT RawMaterials) and in national founded research projects. She is supervisor of undergraduates and PhD students and author of about 100 among peer-reviewed international articles and book chapters, technical reports, conference proceedings and reviewed national articles.



#### **Dr. Luca Fasolino**

Luca Fasolino is General Manager of the ECOEM Consortium, located near Salerno (Campania, Italy), working as national organization for a WEEE collective system. ECOEM is recognized by the Ministry of the Environment and ISO certified for management of WEEEs, batteries, accumulators, domestic and professional photovoltaic modules.



### **Ing. Luca Pucci**

Member of the Board of Directors of the National Scientific Committee of Legambiente, the main Italian Environmental NGO. Main activities and responsibilities: relationships with research centers and universities, scientific support to charity projects and activities, scientific coordinator of volunteer water quality monitoring local programs, volunteers training and mentoring.

(50.000 Inhabitants) Councilor for Environmental Policies of the City of Nocera Inferiore (SA), (2006-20010) Main Project: urban waste collection and recycling plan and infrastructures; Green infrastructure in the area Regional Park “Monti Lattari”; Air monitoring network system; electromagnetic pollution monitoring; Masterplan of landslide risk mitigation measures; bike-sharing system.

Chemical Engineer, he has been working on the design and management of water treatment plants since 1999. Member of the Board of Directors of the Ecoem Consortium, National Collective System for the collection, collection, treatment, recycling of WEEE (waste electrical and electronic equipment).

He does research in Environmental Engineering, Ecology and Citizen Science.