



SAPIENZA
UNIVERSITÀ DI ROMA



Italian-Russian Meeting

Theoretical Fundamentals and Practical Implementation of Energy Saving, Resource Conservation and Waste Recycling in the Process Industry

Roma - 1-2 luglio 2019

Venue: Università degli Studi di Roma La Sapienza

Areas covered

- **Process Optimisation**
- **Waste Recycling**
- **Resource Conservation**
- **Energy Saving**
- **Material Science**
- **Digitalization in Chemical Technologies and Productions**
- **Circular Economy**

Programme

1.7 (Location: Room B, Department of Chemistry)

10:00 Welcome

Director of Chemistry Department and President of Fondazione Roma Sapienza

10:10 Address by Prof. Spallone (Italian Embassy in Moscow)

10:20 Address by Culture Attaché (Russian Embassy in Rome) t.b.c.

Keynote Addresses (Chairman: Prof. Toro)

10:30-10:50 Acad. Meshalkin " *Modern problems of digitalization and sustainability of chemical production and supply chains of petrochemical complex*"

10:50-11:10 Prof. Campanella " *Photosensor of environmental persistence and permanence of pollutants*"

Presentations (Chairman: Prof. Dovì)

11:10-11:30 Prof. Grigorovich " *Development of physical and chemical models and digital twins of resource-efficient and environmentally friendly technologies for the production of steels* "

11:30-11:50 Prof. R. Abdeev " *Environmentally safe and energy and resource efficient way to eliminate the demulsifiers for the separation of oil emulsions in the process of primary processing of gas-liquid mixtures using microwave radiation\ super high frequency radiation*"

11:50-12:10 Dr. I. Abdeev " *Environmentally safe and energy and resource efficient method of utilization of low-grade thermal energy of petrochemical plants using organized vortex air flows*"

12:10-12:30 Dr. Makarova " *Comprehensive risk assessment of the negative impact on the environment and human body for enterprises*"



12:30-13:00 Questions and panel discussion

13:00 Buffet and Come Together

Presentations (Chairman: Prof. Altimari)

14:00-14:20 Prof. Terenteev " *Organic peroxides: synthesis, industry, drug design and agriculture* "

14:20-14:40 Prof. Chistyakova " *Computer system for training innovative specialists in the field of recycling polymer waste* "

14:40-15:00 Dr. Kulova " *Physical chemistry and technology of energy-efficient sodium-ion batteries* "

15:00-15:20 Dr. Zabolotnaya " *Perspective effect of NBICS-convergent technologies on chemical diagnostics in the production of specially pure substances* "

15:20-16:30 Questions and panel discussion

16:30 End of 1st day presentations

2.7 (Location: Room B, Department of Chemistry)

Presentations (Chairman: Acad. Meshalkin)

10:00-10:20 Prof. Pagnanelli " *Circular economy towards nanotechnology: new products from end of life batteries* "

10:20-10:40 Dr. Moscardini, Prof Toro " *Development and Marketing of Advanced Processes and Services Based on Recycling Technologies: Eco Recycling's Experience* "

10:40-11:00 Prof. Petrangeli Papini " *New processes for the remediation of soil and groundwater contaminated by industrial activities* "

11:00-11:20 Dr. Ubaldini " *Application of innovative processes for the enhancement of secondary raw materials* "

11:20-11:40 Ing. Falcone " *Innovation in renewable energy storage and in processes for secondary materials recovery* "

11:40-12:30 Questions, panel discussion and outlooks of future collaboration

12:30 Farewell