

# Nanochemistry of molecular materials for 2-photon *functional* applications

# PARMA, MAY 10-12, 2017 Centro Congressi Santa Elisabetta and Sala Congressi Delle Scienze (Q02) Parco Area Delle Scienze – Campus

#### **AGENDA OF THE CONFERENCE**

	May 10, 2017	May 11, 2017	May 12, 2017
09:00-9:15			Session 6:
09:15-9:30		Nano2Fun Supervisory	Nonlinear Spectroscopy
09:30-09:45		Board meeting	
09:45-10:00			Session 7:
10:00-10:15			2-Photon Polymerization
10:15-10:30		Session 2:	(part 2)
10:30-10:45		Optical Spectroscopy	Coffee Durali
10:45-11:00			Coffee Break
11:00-11:15		Coffee Break	
11:15-11:30		Coffee Break	Session 8:
11:30-11:45		Session 3:	Fluorescent Organic
11:45-12:00		2-Photon Absorbers	Nanoparticles & Imaging
12:00-12:15		& Fluorophores (part1)	Nanoparticles & imaging
12:15-12:30		& Hadrophores (parti)	
12:30-14:00	Registrations	Lunch	Lunch
14:00-14:30	Registrations	Session 4:	
14:30-14:45		2-Photon Absorbers	
	Welcome	& Fluorophores (part 2)	MSCiA:
14:45-15:00		Session 5:	boosting your career
15:00-15:30		2-Photon Polymerization	(Congress Center Q02)
15:30-15:45	Session 1:	(part 1)	
15:45-16:00	Theoretical Modelling	Coffee Break	
16:00-16:30		Correct Break	
16:30-17:00	Coffee Break	MSCiA:	
17:00-17:30	Poster Session	research and innovation	
17:30-18:00	roster session	opportunities for all	
18:00-18:30			
20:00		Social Dinner	













This project has received funding from the EU's 7<sup>th</sup> FP for research, technological development and demonstration under GA no. 607721 Red: Nano2Fun Fellow Blue: Senior Nano2Fun Scientist Green: Invited Speaker

May 10, 2017

12:30-14:30 Registrations

14:30-15:00 Welcome

#### **Session 1: Theoretical Modelling**

<u>15:00-15:30</u> **Fabrizio Santoro** (ICCOM-CNR, Pisa, Italy), *Vibronic Effects On Optical Properties And Nonadiabatic Photophysics. A Quantum/Classical Dynamical Approach* 

<u>15:30-15:45</u> Silvia Illa Tuset (JNCASR, Bangalore, India & ICMAB-CSIC, Barcelona, Spain), *Quatsomes Loaded With Dyes: Molecular Dynamic Simulations And Quantum Mechanics Calculations* 

<u>15:45-16:15</u> **Swapan K. Pati** (JNCASR, Bangalore, India), *Computational Modelling Of Charge Carrier Mobilities In Extended Two And Quasi Two Dimensional Solids* 

<u>16:15-16:30</u> Somananda Sanyal (University di Parma, Italy), Hyper-Rayleigh Scattering Of Linear Aggregates Of Polar Dyes: Amplified Response From Electrostatic Interactions

16:30-17:00 Coffee Break

17:00-18:30 Poster Session

May 11, 2017

09:00-10:00 Nano2Fun Supervisory Board meeting

#### **Session 2: Optical Spectroscopy**

10:00-10:30 **Vladimir Tomin** (Pomeranian University in Slupsk, Poland), *Violation Kasha's Rule And New Facilities Of Life Sciences* 

<u>10:30-10:45</u> **Domna-Maria Nikolaidou** (University of Parma, Italy), *Novel Excimer-Forming Emissive Materials From Organic Radicals* 

<u>10:45-11:00</u> Siarhei Kurhuzenkau (University of Parma, Italy), *Optical Properties, Photostability And Resonance Energy Transfer In Dye-Loaded Quatsomes* 

<u>11:00-11:30</u> Coffee Break

#### Session 3: 2-Photon Absorbers & Fluorophores (part 1)

 $\underline{11:30-12.00}$  Daniel T. Gryko(Polish Academy of Sciences, Warsaw, Poland) π-Expansion Of Diketopyrrolopyrroles Leads To Large Two-Photon Brigtness

<u>12:00-12:30</u> Imma Ratera (ICMAB-CSIC, Barcelona, Spain), *Molecular And Supramolecular Strategies For Highly Luminescent Trityl Radicals And Their Sensing Applications* 

12:30-14:00 Lunch

## Session 4: 2-Photon Absorbers & Fluorophores (part 2)

14:00-14:30 Kevin Belfield (New Jersey Institute of Technology, USA) title to be announced

<u>14:30-14:45</u> **Maxime Klausen** (University of Bordeaux, France) *Cooperative Veratryle And Nitroindoline Cages For Two-Photon Uncaging Using Near Infrared Light* 

#### Session 5: 2-Photon Polymerization (part 1)

<u>14:45-15:15</u> **loanna Sakellari** (Foundation for Research and Technology, Greece), *Quantum Dot Based And Metallic Nanostructures By Direct Laser Writing* 

<u>15:15-15:30</u> **Dzmitryi V. Ushakou** (Pomeranian University in Slupsk, Poland), *Control Of Polymerization Processes Using Esipt-Based Fluorescent Probes* 

<u>15:30-15:45</u> Maria Surnina (Laser Zentrum Hanover, Germany) Characterization Of Materials For 3D Rapid Prototyping

#### 15:45-16:30 Coffee Break

<u>16:30-18:30</u> Marie Skłodowska-Curie in Action: Research And Innovation Opportunities For All.

Round table with Klaus-Günther Barthel, Head of Unit A1 MSC-ITN, European Commission Research Executive Agency

#### May 12, 2017

#### **Session 6: Nonlinear Spectroscopy**

<u>09:00-09:30</u> Eric Van Stryland (CREOL, University of Central Florida, USA), *Impulse Response Functions In Nonlinear Optics* 

<u>09:30-09:45</u> Valentina Pia (University of Antwerp, Belgium), Non-Linear Optical Properties Of Push-Pull TTF- $\pi_n$ -PTM Radicals

#### Session 7: 2-Photon Polymerization (part 2)

<u>09:45-10:15</u> **Yulia Kiyan** (Medical School Hannover, Germany) *In Vitro Angiogenesis In Microfluidic Chips For Microcirculation Study, Disease Modelling, And Animal Experiments Replacement* 

<u>10:15-10:30</u> Dimitrii Perevoznik (Laser Zentrum Hanover, Germany), 3D Printing Of Polymer Structures By Two-Photon Polymerization Using Q-Switched Microchip Laser

#### <u>10:30-11:00</u> Coffee Break

## Session 8: Fluorescent Organic Nanoparticles & Imaging

11:00-11:30 Giuseppe Vicidomini (Italian Institute of Technology, Genova, Italy) title to be announced

<u>11:30-11:45</u> Paolo Pagano (University of Bordeaux, France), Engineering Of Hyperbright And Stable Fluorescent Organic Nanoparticles

<u>11:45-12:15</u> Nora Ventosa (ICMAB-CSIC, Barcelona, Spain), New Fluorescent Nanovesicles, By Self-Assembly Of Organic Fluorophores, Sterols And Surfactants, As Probes For Bioimaging

<u>12:15-12:30</u> Santi Sala (Nanomol Technologies SL, Barcelona, Spain) Scale-Up Of Delos-Susp™ To Produce Lipid-Based Nanocarriers For Drug Delivery And Bioimaging

#### 12:30-14:00 Lunch

14:00-16:00 Marie Skłodowska-Curie in Action: boosting your career \*with Klaus-Günther Barthel, Head of Unit A1 MSC-ITN, European Commission Research Executive Agency, & Matthias Gester Principal Scientist at Procter&Gamble

<sup>\*</sup> this event will take place at the Congress Center Q02