Monday, September 5

9:00-9:15	OPENING CEREMONY Conference venue: Faculty of Law, Administration, and Economics, University of Wrocław ulica Uniwersytecka 22/26, 50-145 Wrocław
SPECIAL SESSION *Announcement and invited talk of the Sturge Prize Winner*	
9:15-09:45	EXCITATION MANAGEMENT AT INTERFACE OF ORGANIC MOLECULE-LANTHANIDE NANOCRYSTAL HYBRID NANOSYSTEM **Renren Deng,** Zhejiang University
SESSION 1 – DOPED INSULATORS 1 – chair W. Stręk	
9:45-10:30	TL1 PHOTONIC EFFECTS IN LUMINESCENCE SPECTROSCOPY **Andries Meijerink**, Utrecht University, The Netherlands
10:30-11:00	IL1 LASER REFRIGERATION OF SAPPHIRE **Stephen Rand**, University of Michigan, USA
11:00-11:30	***COFFEE BREAK***
SESSION 2 – PHOSPHORS 1 – chair S. Mahlik	
11:30-12:00	IL2 CHARGE TRANSFERS PROCESSES IN PHOSPHORS: EMISSION, QUENCHING AND TRAPPING **Jonas Joos**, Ghent University, Belgium
12:00-12:15	O1 INFRARED AND VISIBLE COOPERATIVE LUMINESCENCE OF Yb^{3+} IONS IN MULTISITE YAM CRYSTAL **Michał Malinowski**, Warsaw University of Technology, Institute of Microelectronics and Optoelectronics, Poland
12:15-12:30	O2 EMISSION QUENCHING BY AUGER PROCESSES IN Tm DOPED II-VI MATERIALS **Jarosław Kaszewski**, Institute of Physics, Polish Academy of Sciences, Warsaw, Poland
12:30-12:45	O3 INSIGHT INTO THE ENERGY TRANSFER MECHANISM BETWEEN ELPASOLITE HOSTS AND INCORPORATED YTTERBIUM **Jur de Wit**, Utrecht University, The Netherlands
12:45-13:00	O4 UNDERSTANDING THE GIANT EMISSION REDSHIFT IN CONCENTRATED Mn^{2+} PHOSPHORS **Arnoldus van Bunningen**, Utrecht University, The Netherlands
13:00-15:00	***LUNCH TIME***
SESSION 3-PHOSPHOPRS 2 – chair M. Malinowski	
15:00-15:30	IL3 ULTRA-BROADBAND NEAR-INFRARED PHOSPHORS FOR LIGHT-EMITTING DIODES **Sebastian Mahlik**, University of Gdańsk, Poland
15:30-16:00	IL4 LOW PHONON GLASS-CERAMICS FOR ACTIVE PHOTONICS **Magdalena Leśniak**, AGH University of Science and Technology, Poland
16:00-16:15	O5 OXONITRIDOSILICATE PHOSPHORS FOR LEDs **Jerzy Sokolnicki,** University of Wroclaw, Faculty of Chemistry, Poland
16:15-16:30	O6 LUMINESCENT INKS BASED ON Eu:PO_4 NANOPARTICLES AND POLYVINYL ALCOHOL FOR ANTI-COUNTERFEITING **Maria Luisa Saladino**, University of Palermo, Italy
16:30-17:00	***COFFEE BREAK***
SESSION 4 – DOPED INSULATORS 2 – chair – St. Rand	
17:00-17:30	IL5 FERROELECTRICALLY DRIVEN LATERAL MoS_2 p-n HOMOJUNCTIONS PROBED BY OPTICAL SPECTROSCOPY **Mariola Ramirez**, Universidad Autonoma de Madrid, Spain
17:30-17:45	O7 DETERMINING THE ELECTRON AND HOLE SPIN RELAXATION RATES IN $CsPbI_3$ NANOCRYSTALS **Amrita Dey**, Ludwig-Maximilians-Universität Germany
17:45-18:00	O8 LUMINESCENCE OF BI-FUNCTIONAL $Bi_2ZnOB_2O_6$ SINGLE CRYSTALS DOPED WITH RE^{3+} IONS **Dobrosława Kasprowicz**, Poznań University of Technology, Poland
18:00-18:15	O9 THE STUDIES OF ULTRAFAST CROSS - AND INTRABAND LUMINESCENCE IN WIDE GAP SOLIDS **Marco Kirm**, Institute of Physics, University of Tartu, Estonia
19:15-21:00	***GET TOGETHER PARTY*** *Oratorium Marianum* *The main building of the University of Wrocław,* *Plac Uniwersytecki 1, Wrocław*

Monday, September 5

Tuesday, September 6

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	SESSION 5 – THERMOMETRY – chair A. Meijerink	
	9:15-10:00	TL2 ANOMALIES IN LIQUID WATER QUIZZED THROUGH UPCONVERSION THERMOMETRY **Luis Carlos**, University of Aveiro, Portugal
	10:00-10:30	IL6 LUMINESCENCE THERMOMETRY - NOT ONLY AN APPLICATION BUT A NEW PERSPECTIVE ON NON-RADIATIVE RATES **Markus Suta**, Heinrich Heine University Düsseldorf, Germany
	10:30-11:00	IL7 THEORETICAL MODELING OF LANTHANIDE-BASED LUMINESCENT THERMOMETERS **Albano Carneiro**, University of Aveiro, Portugal
	11:00-11:30	**COFFEE BREAK**
	SESSION 6 – LUMINESCENT SENSORS 1 – chair L. Carlos	
	11:30-12:00	IL8 APPLICATIONS OF HYBRID LUMINESCENT (NANO)THERMOMETERS **Anna Kaczmarek**, Department of Chemistry, Ghent University, Belgium
	12:00-12:30	IL9 LANTHANIDE ACTIVATED KY_3F_{10} NANOPARTICLES FOR NANOTHERMOMETRY **Adolfo Speghini**, University of Verona, Italy
	12:30-12:45	O10 LUMINESCENCE-BASED RATIOMETRIC OPTICAL POWER METER **Lukasz Marciniak**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
	12:45-13:00	O11 Pr-ACTIVATED GARNETS FOR WIDE-RANGE LUMINESCENCE THERMOMETRY **Eugeniusz Zych**, University of Wroclaw, Faculty of Chemistry, Poland
	13:00-15:00	***LUNCH TIME***
	SESSION 7 – LUMINESCENT SENSORS 2 – chairs M. Suta & A. Corneiro	
	15:00-15:15	O12 A Ho^{3+}-BASED LUMINESCENT THERMOMETER FOR SENSITIVE SENSING OVER A WIDE TEMPERATURE RANGE **Freddy Rabouw**, Utrecht University, The Netherlands
	15:15-15:30	O13 SrB_4O_7 DOPED WITH DIVALENT LANTHANIDE IONS (Eu^{2+}, Sm^{2+}, Tm^{2+}) – A MULTIFUNCTIONAL SENSING PLATFORM FOR HIGH-SENSITIVITY LUMINESCENCE MANOMETRY & THERMOMETRY **Marcin Runowski**, Departamento de Física, Universidad de La Laguna, Tenerife, Spain
	15:30-15:45	O14 THE ROLE OF Cr^{3+} IONS IN THE PERFORMENCE OF MULTIFUNCIONAL NANOPARTICLES FOR LUMINESCENCE THERMOMETRY AND OPTICAL HEATING APPLICATIONS **Kamila Maciejewska**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
	15:45-16:00	O15 YAG:Tb-YAG:Pr SINGLE CRYSTAL-THIN FILM HYBRID LUMINESCENCE THERMOMETER **Joanna Jedoń**, University of Wroclaw, Faculty of Chemistry, Poland
	16:00-16:15	O16 EXTENDING THE DYNAMIC TEMPERATURE RANGE OF BOLTZMANN THERMOMETERS **Thomas van Swieten**, Utrecht University, The Netherlands
	16:15-17:15	IL10 (on-line) Cr^{3+}-BASED LUMINESCENT SENSORS: DESIGN, STRENGTHS AND WEAKNESSES **Michele Back**, Ca' Foscari University of Venice, Italy
	17:00-17:15	***CONFERENCE PHOTO***
	17:15-18:30	***COFFEE BREAK & POSTER SESSION***

Wednesday, September 7

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SESSION 8 – QUANTUM TECHNOLOGIES - chair M. Reid	
9:15-9:45	IL11 SPECTROSCOPY AND COHERENT CONTROL OF INDIVIDUAL ERBIUM DOPANTS **Andreas Reiserer**, Max-Planck-Institute of Quantum Optics and TU Munich, Germany
9:45-10:30	TL3 RARE EARTH DOPED CRYSTALS FOR QUANTUM TECHNOLOGIES **Philippe Goldner**, French National Centre for Scientific Research, France
10:30-11:00	IL12 RARE-EARTH MOLECULAR CRYSTALS WITH ULTRA-NARROW OPTICAL LINEWIDTH FOR PHOTONIC QUANTUM TECHNOLOGIES **Diana Serrano**, IRCP, Chimie ParisTech, CNRS, France
11:00-11:30	***COFFEE BREAK***
SESSION 9 – QUANTUM & OPTICAL MATERIALS – chair P. Goldner	
11:30-12:00	IL13 OPTICAL GATE OPERATIONS IN RARE EARTH IONS AND THEIR ROLE IN QUANTUM COMPUTING **Andreas Walther**, Lund University, Sweden
12:00-12:15	O17 PRESSURE INDUCED CHANGES IN THE OPTICAL PROPERTIES OF Mn^{4+} DOPED FLUORIDE PHOSPHORS **Tadeusz Leśniewski**, Faculty of Mathematic, Physics and Informatics, University of Gdańsk, Poland
12:15-12:30	O18 OPTICAL THERMOMETER BASED ON THE LUMINESCENCE OF A_2MgWO_6 DOPED WITH Dy^{3+} (A = Ca, Sr, Ba) **T.H.Q. Vu**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
12:30-12:45	O19 TEMPERATURE DEPENDENCE OF THE COHERENCE PROPERTIES OF 171Yb^{3+} IONS IN Y2SiO5 CRYSTALS **Federico Chiossi,** Chimie ParisTech, PLS University, CNRS, Institut de Recherche de Chimie, Paris 75005, France
12:45-13:00	O20 (on-line) NEAR-FIELD SCANNING OPTICAL MICROSCOPY OF MOLECULAR AGGREGATES: THE ROLE OF LIGHT POLARIZATION **Sidhartha Nayak**, Max Planck Institute for the Physics of Complex Systems, Dresden, Germany
13:00-15:00	***LUNCH TIME***
16:00-22:00	***CONFERENCE EXCURSION***

Thursday, September 8

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SESSION 10 – THEORY & NON-LINEAR PHENOMENA – chair M. Ramirez	
9:15-10:00	TL4 MAKING SENSE OF RARE-EARTH ELECTRONIC STRUCTURE **Mike Reid**, University of Canterbury, New Zealand
10:00-10:30	IL14 SILVER NANOWIRE – THE PLASMONIC MAGIC WAND **Sebastian Maćkowski**, Nicolaus Copernicus University in Toruń, Poland
10:30-10:45	O21 ULTRAFAST MAGNETO-ELECTRIC NONLINEARITY **Gregory Smail**, University of Michigan, USA
10:45-11:00	O22 OXYGEN VACANCIES IN LUTETIUM OXIDE AS ELECTRON TRAPS: PLANE-WAVE DFT AND AB INITIO MULTICONFIGURATIONAL APPROACHES **Andrii Shyichuk**, University of Wroclaw, Poland
11:00-11:30	***COFFEE BREAK***
SESSION 11 – NEW MATERIALS & (BIO)LABELS – chair A. Kaczmarek, T. Grzyb	
11:30-12:00	IL15 INTRINSIC AND DEFECT-RELATED LUMINESCENCE OF GARNET AND PEROVSKITE COMPOUNDS **Yuriy Zorenko**, Kazimierz Wielki University in Bydgoszcz, Poland
12:00-12:30	IL16 POLARIZED NANO-EMITTERS AS ORIENTATION PROBES IN BIOFLUIDS **Zijun Wang**, Ecole Polytechnique, France
12:30-12:45	O23 THE MOST INTRIGUING FEATURES OF Ln^{3+} CHELATES WITH N-PHOSPHORYLATED AMIDES: BRILLIANT LUMINESCENCE AND SINGLE-ION MAGNET BEHAVIOR, TRANSFER VIA SINGLET, THE RESONANCE EFFECT **Paula Gawryszewska,** , University of Wroclaw, Poland
12:45-13:00	O24 COHERENT ANTI-STOKES RAMAN SCATTERING AND SECOND HARMONIC GENERATION SPECTROSCOPY AND IMAGING OF DNA CONSTITUTES AND COLLAGEN **Galyna Dovbeshko,** Institute of Physics of National Academy of Sciences of Ukraine, Kyiv, Ukraine
SESSION 12 – UPCONVERSION 1 – chair D. Serrano	
13:00-15:00	**LUNCH TIME**
15:00-15:45	TL5 (on-line) AMPLIFYING THE POTENTIAL OF UPCONVERTING NANOPARTICLES **Peter James Schuck**, Columbia University, USA
15:45-16:15	IL17 STARTEGIES TO ENHANCE VIS-TO-UVC UPCONVERSION IN PR^{3+} DOPED FLUORIDE NANO- AND MICRO-CRYSTALS **Dominika Wawrzyńczyk**, Wroclaw University of Technology, Poland
16:15-16:30	O25 AVALANCHE EMISSION FOR NEW BIOMEDICAL APPLICATIONS **Artur Bednarkiewicz**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
16:30-17:00	***COFFEE BREAK***
SESSION 13 – UPCONVERSION 2 – chair A. Bednarkiewicz	
17:00-17:15	O26 ON THE WAY TOWARDS PHOTON AVALANCHE INTENSITY RISE DYNAMICS ENGINEERING **Marcin Szalkowski**, Institute of Low Temperatures and Structure Research, Wrocław, Poland
17:15-17:45	IL18 TAKING ADVANTAGE OF Er^{3+} IONS IN UP-CONVERTING CORE@SHELL NANOPARTICLES **Tomasz Grzyb**, Adam Mickiewicz University, Poznań, Poland
17:45-18:15	IL19 AN ANHYDROUS APPROACH FOR LIGHT HARVESTING UPCONVERTING NANOPARTICLES **Gilles Ledoux**, University Lyon 1/CNRS, France
20:00-	***CONFERENCE BANQUET*** *Venue: RESTAURACJA FORUM KULINARNE, plac Wolności 4, Wrocław*

Friday, September 9

Friday, September 9	
SESSION 14 – DOPED INSULATORS & DEFECTS – chair A. Speghini	
9:15-10:00	TL6 (on-line) CHARGING/FADING PROCESS OF ELECTRON TRAPS IS VISIBLE IN TRANSPARENT GARNET CERAMICS **Setsuhisa Tanabe**, Kyoto University, Japan
10:00-10:30	IL20 (on-line) CRYSTAL ENGINEERING DESIGN: A TOOLBOX FOR UNPRECEDENT NEAR-INFRARED EMISSION **Zhiguo Xia**, South China University of Technology , China
10:30-11:00	IL21 (on-line) DEFECT SPECTROSCOPY IN METAL HALIDE PEROVSKITES: A THEORETICAL INSIGHT **Chong-Geng Ma**, Chongqing University of Posts and Telecommunications, Chongqing, China
11:00-11:30	***COFFEE BREAK***
SESSION 15 – NEW LUMINESCENT MATERIALS – chair – Y. Zorenko	
11:30-11:45	O27 MULTIPHOTON IONIZATION PHENOMENA IN Cr:YAG TRANSPARENT CERAMICS UNDER NIR EXCITATION **Mykhailo Chaika**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Poland
11:45-12:00	O28 QUANTUM TELEPORTATION BY ENTANGLED PHONONS IN SPATIALLY SEPARATED MACROSCOPIC AL PLATES AT ROOM TEMPERATURE AND PHONON RESONANCE EFFECTS ON SYNCHRONIZATION OF OSCILLATION PHASE OF O-H BONDS AND H-BOND NETWORK IN LIQUID WATER, LOWERING ISOTHERMALLY PHONON AND CONFIGURATIONAL ENTROPY, REVEALED BY MICRO-RAMAN SPECTROSCOPY **Małgorzata Samsel-Czekała,** Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
12:00-12:15	O29 LASER-DRIVEN EMISSION OF GRAPHENE FOAM AS A SPATIALLY COHERENT SOURCE OF WHITE LIGHT **Mateusz Oleszko**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
12:15-12:30	O30 BROADBAND LASER-INDUCED WHITE EMISSION OF $La_{1-x}Nd_xAlO_3$ PEROVSKITE NANOCRYSTALS IN ALCOHOLS **Joao Goncalves**, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wrocław, Poland
12:30-13:00	IL22 TWO-BEAM STUDIES OF RECOMBINATION PROCESSES IN β-Ga_2O_3; A NEW SEMICONDUCTING SCINTILLATION MATERIAL **Andrzej J. Wojtowicz**, Nicolaus Copernicus University, Toruń, Poland
13:00-15:00	***CLOSING CEREMONY***