

**Europt(r)ode XV, Warsaw**

**Final program**

28 November, 2021 Sunday	
17:00-18:00	Registration
18:00-20:00	Welcome reception (sponsored by Analyst RSC)

29 November, 2021, Monday			
08:00-09:00	Registration		
08:45-09:00	Opening Lecture hall A		
09:00-09:45	PL1	<b>Mid-IR Fiber-Optic Sensors</b> Katzir Abraham Lecture hall A	
9:45-10:15	PLPlus	<b>The role of Photonic Biosensors in the COVID-19 fast diagnosis</b> <u>Laura Lechuga</u> , M. Soler, G. Ruiz and M.-C. Estevez Lecture hall A	
	<b>Lecture hall A</b>		<b>Lecture hall B</b>
	<b>Nanosensors</b>		<b>Plasmonics</b>
10:20-10:40	O1	<b>Optical nanosensors based on solvatochromic dye transducers</b> Yoshiki Soda, Kye J. Robinson, Robin Nussbaum, <u>Eric Bakker</u>	O2 <b>Metal-polymer hybrid nanomaterials for plasmonic ultrafast hydrogen</b> <u>Darmadi Iwan</u> , Nugroho Ferry , Cusinato Lucy, Susarrey-Arce Arturo, Schreuders Herman, J. Bannenber Lars, Bastos da Silva Fanta Alice, Kadkhodazadeh Shima, B. Wagner Jacob, J. Antosiewicz Tomasz, Hellman Anders, P. Zhdanov Vladimir, Dam Bernard
10:40-11:00	O3	<b>Optical sensors based on micro- and nanocellulose</b> <u>Mohr Gerhard</u> , Hesse Jan, Krawczyk Krzysztof	O4 <b>Multiple SPR detection of biological targets through a microstructured optical fiber bundle</b> Desmet Cloé, <u>Bratash Oleksii</u> , Vindas Karim, Alvarado Meza Ricardo, Garrigue Patrick, Voci Silvia, Sojic Neso, Maziz Ali, Courson Remi, Malaquin

				Laurent, Leichle Thierry, Buhot Arnaud, Roupioz Yoann, Leroy Loïc, Engel Elodie
11:00-11:30	Coffee break (sponsored by ACS Sensors)			
	<b>Lecture hall A</b>		<b>Lecture hall B</b>	
11:30-11:50	O5	<b>Fabrication of plasmonic sensing probes based on the controllable immobilization of AuNPs on optical fiber facets</b> Alba Calatayud-Sanchez, Angel Ortega-Gomez, Javier Barroso, Joseba Zubia, Fernando Benito-Lopez, Joel Villatoro, <u>Lourdes Basabe-Desmots</u>	O6	<b>Low cost template-assisted lithography for the fabrication of plasmonic biosensors</b> <u>Colombelli Adriano</u> , Lospinoso Daniela, Cesaria Maura, Taurino Antonietta, Rella Roberto
11:50-12:10	O7	<b>Photon-upconversion nanoparticles for single-molecule immunoassays</b> <u>Farka Zdenek</u> , Mickert Matthias J., Hlavacek Antonin, Skladal Petr, Gorris Hans H.	O8	<b>Advances in plasmonic biosensors and their applications in medicine</b> Homola Jiri, Bockova Marketa, <u>Springer Tomas</u> , Hemmerova Erika, Lynn Nicholas Scott, Chrastinova Leona, Pastva Ondrej, Dyr Jan E.
12:10-12:30	O9	<b>Dip-stick coated with Polystyrene-Silica Core-Shell particles for the detection of microbiological fuel contamination</b> <u>Charlie Tobias</u> , Estela Climent, Raúl Gotor, Jérémy Bell, Knut Rurack	O10	<b>Ultrasensitive plasmonic apta-immunosensor for detection of malaria biomarkers in human whole blood</b> A. Minopoli, D. Mayer, J.A. Tanner, A. Offenhäusser, B. Della Ventura, <u>R. Velotta</u>
12:30-12:50	O11	<b>Antibody-Gated Dye Delivery Systems for Type-I Pyrethroids Detection</b> <u>Estela Climent</u> , Elena Costa, Michael G. Weller, Knut Rurack	O12	<b>Fiber optic plasmonic sensing of copper ions in water with picomolar detection limit</b> <u>Ortega Gomez Angel</u> , Barros Lazaro Javier, Calatayud Sanchez Alba, Benito López Fernando, Zubia Joseba, Basabe Desmots Lourdes, Villatoro Joel
12:50-13:10	O13	<b>Common-path interferometric photonic biosensor with ultrahigh sensitivity and large dynamic range</b> <u>Barth Isabel</u> , Conteduca Donato, F. Krauss Thomas	O14	<b>Surface plasmon microscopy of nanoscale electrochemical processes</b> <u>S. Nizamov</u> , Veronika K. Laurinavichyute, Vladimir M. Mirsky

13:10-14:30	Lunch	
14:30-15:15	PL2	<b>Bionanotechnology-based enabling technologies</b> Sylvia Daunert Lecture hall A
	<b>Lecture hall A</b>	<b>Lecture hall B</b>
15:20-15:50	INV2	<b>Detection of large analytes by wide field surface plasmon microscopy: recent progress and fundamental limitations</b> Mirsky Vladimir
	INV4	<b>Fluorescent Chemosensors and Imaging Agents</b> James Tony
	<b>Biomedical applications</b>	
	<b>Environmental analysis</b>	
15:50-16:10	O15	<b>Enhanced fluorescence-optical glucose monitoring using a mutant form of the glucose-galactose binding protein</b> L. Neuner, T. Roth, M. Tric, L. Freitag, P. Wiedemann, S. Wölfl, <u>T. Werner</u>
	O16	<b>Multiparametric sensing – from development to application in marine science</b> <u>Zieger Silvia</u> , Mistlberger Günter, Lukas Troi, Ingo Klimant
16:10-16:30	O17	<b>Label-free plasmonic biosensor for covid-19 serology</b> <u>Olalla Calvo-Lozano</u> , Miquel Sierra, Maria Soler, M.-Carmen Estévez, Luis. Chiscano, Adolfo Ruiz-Sanmartin, Juan Carlos Ruiz-Rodriguez, Ricard Ferrer, Juan José González-López, Juliana Esperalba, Candela Fernández-Naval, Leticia Bueno, Ruben López-Aladid, Antoni Torres, Laia Fernández-Barat, Sarah Attoumani, Rémi Charrel, Bruno Coutard, Laura M. Lechuga
	O18	<b>Optical sensing of nitrogen, phosphorus and potassium: a spectrophotometric Artificial Intelligence assisted approach towards smart nutrient deployment</b> Silva Filipe, Martins Rui, Coelho Luis, <u>Jorge Pedro</u>
16:30-16:50	O19	<b>A novel NIR excitable fluorescent probe for intracellular nitric oxide detection: from macrophages to human leukemic cells</b> <u>C. Arnau del Valle</u> , P. Thomas, M. P. Muñoz, F. Galindo and M. J. Marín
	O20	<b>Optical eDNA sensing - translating from the lab to the field</b> <u>Williams Molly</u> , O'Grady Joyce, Briciu-Burghina Ciprian, Kent Nigel, Parle-McDermott Anne, Regan Fiona
16:50-17:10	Coffee break	

Supplementary session				
Lecture hall A			Lecture hall B	
17:10-17:30	OS1	<b>Development of a new biosensor for the detection of immunoglobulins against SARS-COV-2 and its performance evaluation with elisa technique</b> <u>A.M.M. Murillo</u> , J. Tomé-Amat, Y. Ramírez, M. Garrido-Arandia, L.G. Valle, G. Hernandez-Ramírez, L. Tramarin, P. Herreros, B. Santamaría, A. Díaz-Perales, M. Holgado	OS2	<b>Investigation on a photonic signal enhancement method for point-of-care biosensing applications</b> <u>T. Kothe</u> , E. Melnik, C. Steininger, P. Müllner, and R. Hainberger
17:30-17:50	OS3	<b>Fast Detection of SARS-CoV-2 in Nasal and Throat Swabs by a Simple Colorimetric Test</b> B. Della Ventura, M. Cennamo, A. Minopoli, R. Campanile, D. Terracciano, G. Portella, <u>R. Velotta</u>	OS4	<b>Microfluidics combined with fluorescence in situ hybridization (FISH) for Candida tropicalis detection</b> <u>Barbosa VB</u> , Rodrigues CF, Cerqueira L, Miranda J, Azevedo NF
17:50-18:10	OS5	<b>Dual surface-enhanced fluorescence imaging and ultra-high FOM sensing in all-dielectric metasurfaces</b> <u>S. Romano</u> , M. Mangini, S. N. Lara Yépez, S. Cabrini, I. Rendina, A. C. De Luca, V. Mocella, G. Zito	OS6	<b>A novel multifunctional attenuated total reflection sensor concept for quantum cascade laser based infrared spectroscopy</b> <u>A. Teuber</u> , R.Stach, B. Mizaikoff
18:10-19:00	Poster session 1 (on site)			
19:00-20:00	Poster session 1 (online)			
30 November 2021, Tuesday				
09:00-09:45	PL3	<b>Lab on fiber technology: the roadmap towards multifunctional plug&amp;play platforms for life science applications</b> Cusano Andrea Lecture hall A		
Lecture hall A			Lecture hall B	
09:50-10:20	INV5	<b>Lanthanide-doped nanoparticles – design, synthesis and</b>	INV6	<b>Plasmon-enhanced fluorescence biosensors</b>

		<b>functionalization for sensing applications</b> Hirsch Thomas		<u>Dostalek Jakub</u> , Fossati Stefan, Hageneder Simone, Quilis Nestor G., Kotlarek Daria, Venugopalan Priyamvada, Auer Simone, Barišić Ivan
	<b>Nanosensors</b>		<b>Label-free sensing</b>	
10:20-10:40	O21	<b>Polymerless nano-optode receptors</b> Baranowska-Korczyk Anna, Kisiel Anna, Kaczmarczyk Brian, Baniak Barbara, Maksymiuk Krzysztof, <u>Michalska Agata</u>	O22	<b>Diffraction bioreceptor networks for the optical transduction of biorecognition events</b> <u>Avella-Oliver Miquel</u> , Juste-Dolz Augusto, Fernandez Estrella, Puchades Rosa, Maquieira Angel
10:40-11:00	O23	<b>Rationally Designed PdAuCu Ternary Alloy Nanoparticles for Intrinsically Deactivation-Resistant Ultrafast Plasmonic Hydrogen Sensing</b> <u>Iwan Darmadi</u> , Ferry Anggoro Ardy Nugroho, Shima Kadkhodazadeh, Jakob B. Wagner, Christoph Langhammer	O24	<b>Non-Langmuir behaviour of solid-phase DNA hybridization</b> <u>Vanjur Luka</u> , Carzaniga Thomas, Casiraghi Luca, Zanchetta Giuliano, Bellini Tommaso, Buscaglia Marco
11:00-11:30	Coffee break			
	<b>Lecture hall A</b>		<b>Lecture hall B</b>	
11:30-11:50	O25	<b>Layer-by-layer biofunctionalization for affinity biosensing with porous silicon interferometers</b> <u>Mariani Stefano</u> , Robbiano Valentina, Strambini Lucanos Marsilio, Debrassi Aline, Egri Gabi, Dähne Lars, Barillaro Giuseppe	O26	<b>Guided mode resonance sensor for the parallel detection of multiple protein biomarkers in human urine with high sensitivity</b> Ahmad Kenaan, Kezheng Li, Isabel Barth, Steven Johnson, Jie Song, <u>Thomas F. Krauss</u>
11:50-12:10	O27	<b>Biomacromolecular gratings on micrometric optical fibers for label-free biosensing</b> <u>Juste-Dolz Augusto</u> , Avella-Oliver Miquel, Delgado Martina, Fernández Estrella, Pastor Daniel, Andrés Miguel V., Maquieira Ángel	O28	<b>Rational design of multiplex miRNA assay assisted by label-free analysis</b> G. Zanchetta, T. Carzaniga, L. Vanjur, L. Casiraghi, T. Bellini, <u>M. Buscaglia</u>

12:10-12:30	O29	<b>Nanostructured silver sensor for SERS detection of phenolic compounds</b> <u>O. Eremina</u> , O. Kapitanova, I. Lemesh, M. Ferree, T. Shekhovtsova, E. Goodilin, I. Veselova	O30	<b>Detection of low concentration of matrix metalloproteinase 9 (MMP9) using resonant nanopillars (R-NPs) as label-free optical transducers for disease monitoring</b> <u>Lopez Hernandez Ana</u> , Iagunar heras maria fe, Santamaría Beatriz, Ramirez Yolanda, Herreros Pedro, Lopez Rocio, Quintero Sergio, Tramarin Luca, Ciaurriz Paula, Cornago Iñaki, Pujari Sidharam, Zuilhof Han, Ashammaki Nnureddin, KHADEMHOSEINI Ali, Holgado Bolaños Miguel
12:30-12:50	O31	<b>Silica based nanomaterials for sensor applications: challenges, opportunities and risks</b> <u>Aleksandra Lobnik</u> , A. Košak, P. Nedeljko, L. Popović, M. Lakić, A. Gutmaher	O32	<b>Biosensing by direct observation of leaky waveguide modes</b> Goddard Nick, <u>Gupta Ruchi</u>
12:50-13:10	O33	<b>Machine-learning based SERS nanosensors for optophysiology</b> Masson Jean-Francois	O34	<b>Multiplexed mycotoxin determination with a white light reflectance spectroscopy sensor</b> Anastasiadis Vasileios, <u>Petrou Panagiota</u> , Koukouvinos Georgios, Goustouridis Dimitris, Raptis Ioannis, Misiakos Konstantinos, Kakabakos Sotirios
13:10-14:30	Lunch			
14:30-15:15	PL4	<b>Towards Third Generation Biosensing with Quantum Dot Bioconjugates</b> Sebastián A. Díaz, Kimihiro Susumu, Eunkeu Oh, Michael H. Stewart, James B. Delehanty, <u>Igor L. Medintz</u>  <b>Lecture hall A</b>		
	<b>Lecture hall A</b>		<b>Lecture hall B</b>	
15:20-15:50	INV7	<b>Biosensing with optical fiber gratings</b> Chiavaioli Francesco, Baldini Francesco, Tombelli Sara, Trono Cosimo, <u>Giannetti Ambra</u>	INV8	<b>Monolithically integrated biosensors</b> <u>Makarona E.</u> , Misiakos K., P. S. Petrou, S. E. Kakabakos, I. Raptis

	Biosensors		Integrated devices	
15:50-16:10	O35	<p><b>Phage display is booming for optical biosensing</b></p> <p>R. Peltomaa, <u>E. Benito-Peña</u>, R. Barderas, L. N. Gómez-Arribas, A. Luque-Uría, C. Cuadrado, A. Juste-Dolz, D. Gimenez-Romero, Á. Maquieira<sup>4</sup>, T. Head, S. Deo<sup>5</sup>, S. Daunert, M.C. Moreno-Bondi</p>	O36	<p><b>Integrated-optical detection of ammonia gas using dye-doped PMMA polymer coating</b></p> <p><u>Eggeling Moritz</u>, Muellner Paul, Vogelbacher Florian, Nevlacsil Stefan, Sagmeister Martin, Roger Frederic, Kraft Jochen, Plesshoff Svenja, Weigel Wilfried, Trupp Sabine, Starmans Franziscus, Vaupot Jan, Waldner Roland, Hainberger Rainer</p>
16:10-16:30	O37	<p><b>Rapid and label-free determination of three sepsis markers using a white light reflectance spectroscopy biosensor</b></p> <p><u>Tsounidi Dimitra</u>, Goustouridis Dimitris, Tsaousis Vasilios, Mitropoulos Chrysanthos, Kakabakos Sotirios, Petrou Panagiota, Raptis Ioannis</p>	O38	<p><b>An innovative enhanced interferometric optical detection method of ocular and systemic disease diagnosis</b></p> <p><u>B. Santamaría</u>, L. Rodriguez-Lorenzo, B. Espiña, P. Herreros, L. Tramarín, R. L. Espinosa, M.F. Laguna, M. Holgado</p>
16:30-16:50	O39	<p><b>Plasmonic biosensor based on an array of metal nanostripes for detection of nucleic acids</b></p> <p><u>Slaby Jiri</u>, Bockova Marketa, Lynn Nicolas Scott, Homola Jiri</p>	O40	<p><b>Miniaturized optical system for heavy metals analysis using carbon dots as luminescent reagents</b></p> <p>Puyol Mar, <u>Pascual-Escó Alex</u>, Alonso-Chamarro Julian, Berenguel-Alonso Miguel</p>
16:50-17:20	Coffee break			
17:20-18:00	Poster session 2 (on site)			
18:00-19:00	Poster session 2 (online)			
20:00-23:00	Conference dinner			

01 December 2021, Wednesday		
09:00-09:45	PL5	<p><b>Photopharmacology: towards light-controlled therapy</b></p> <p>Szymanski Wiktor</p> <p><b>Lecture hall A</b></p>

	Lecture hall A		Lecture hall B	
09:50-10:20	O51	<b>Real-time particle motion analysis for continuous biosensing with single-molecule resolution</b> <u>M.H. Bergkamp</u> , L.J. van IJzendoorn, M.W.J. Prins	INV10	<b>Thermally activated delayed fluorescence for optical sensing</b> Borisov Sergey
	<b>Biomedical applications</b>		<b>Industrial applications</b>	
10:20-10:40	O41	<b>Surface plasmon-enhanced fluoresce biosensor for semi-continuous monitoring of cardiac marker: troponin I</b> <u>Toma Koji</u> , Oishi Koki, Arakawa Takahiro, Mitsubayashi Kohji	O42	<b>Nanoparticles with molecularly imprinted polymer coating for luminescent intensity and lifetime sensing of tenuazonic acid mycotoxin</b> <u>J. Quilez-Alburquerque</u> , A. B. Descalzo, M. C. Moreno-Bondi, G. Orellana
10:40-11:00	O43	<b>Chemical imaging how optical sensors can help understand biological systems</b> <u>Koren Klaus</u> , Mosshammer Maria, Brodersen Kasper , Trampe Erik, Kühl Michael	O44	<b>Disposable oxygen sensors for fast on-site quantification of total aerobic microflora and non-destructive monitoring of residual oxygen in industrial packaged meat samples</b> Santovito Elisa, <u>Elisseeva Sophia</u> , Kerry Joseph P., Papkovsky Dmitri B.
11:00-11:25	Coffee break			
	<b>Lecture hall A</b>		<b>Lecture hall B</b>	
	<b>Integrated devices</b>		<b>Environmental applications</b>	
11:25-11:45	O45	<b>Highly sensitive, temperature-controlled SPR based portable biosensing tool for detecting biomolecular interactions.</b> <u>S.Ganesan</u> , S.Maricot, J-P.Vilcot, D. Bernier, F. Dortu	O46	<b>Picomolar, highly specific detection of glyphosate in aqueous environments using on-site optical readouts</b> Rettke David, Döring Julia, Riedl Veronika, Quaas Maximilian, Ostermann Kai, <u>Pompe Tilo</u>
11:45-12:05	O47	<b>New interferometric label-free biosensing system for food allergy diagnostics with biophotonic sensing cells</b> <u>Espinosa Rocio L.</u> , Garrido-Arandia Maria, Romero-Sahangun Alejandro, Herreros Pedro, Tramarin Luca, Laguna	O48	<b>Development of low cost optical sensors as decision support tools for coastal areas</b> <u>C. Briciu-Burghina</u> , C. O'Kelly, P. Trickett, K. Moore, G. Tarpey, J. Garcia, S. McGlynn, F. Regan



		Maria Fe, Diaz-Perales Araceli, Holgado Miguel		
12:05- 12:25	O49	<b>Plasmonic bi-modal biosensing</b> <u>Fossati Stefan</u> , Hageneder Simone, Reiner Agnes T., Binting Johannes, Ramach Ulrich, Lechner Bernadette, Knoll Wolfgang, Dostalek Jakub	O50	<b>Sensing with plasmonically active metallic nanostructures</b> Sulowska Karolina, Cwik Michal, Wiwatowski Kamil, Rozniecka Ewa, Niedziolka-Jonsson Joanna, <u>Mackowski Sebastian</u>
12:30- 12:50	Closing ceremony Lecture hall A			