

INTERNATIONAL CONFERENCE ON METHODS  
AND APPLICATIONS IN FLUORESCENCE

# MAF<sup>2022</sup>

11<sup>th</sup>-14<sup>th</sup> September, Gothenburg, Sweden



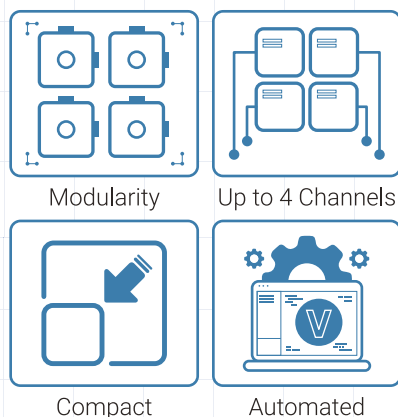
# PROGRAM

# Q2 | The Affordable Laser Scanning Confocal for Life Sciences Research

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Q2 is an affordable, compact and modular Time-Resolved Laser Scanning Microscope for quantitative cell biology and material sciences applications with single-molecule detection. Featuring three laser ports, it can be equipped with a variety of lasers including a multiphoton laser. Additionally, up to four detectors (GaAs, Hybrid Detectors, SPADs) and one spectrograph can be coupled to the Q2 for the acquisition of FLIM images, all of the Fluorescence Fluctuations Spectroscopy measurements, single molecule FRET and antibunching.



# WELCOME

We are excited to welcome you to the 17<sup>th</sup> conference in the MAF (Methods and Applications in Fluorescence) series. The MAF2022 is held at Chalmers University of Technology in Göteborg, Sweden, September 11-14 2022.

MAF has a long-standing tradition of bringing together world-leading experts in fluorescence, one of the most powerful spectroscopy and imaging methods with applications ranging from materials research to life sciences. Our aim is to keep and develop this tradition and we have gathered a large number of established scientists, emerging investigators, students and postdocs to discuss state-of-the-art in the field of research. Facilitated by the convenient layout of the convention center at Chalmers University of Technology and an inspiring program we aim at catalyzing a vivid exchange of ideas and an extensive networking among participants.

Together with our Local Organizing Committee, we hope you will be experiencing a stimulating conference together with us.

**Welcome to Göteborg and MAF2022!**

*With our warm welcome,  
Marcus Wilhelmsson and Bo Albinsson  
Main organizers of MAF2022 in Göteborg*

Special thanks to the  
**MARCUS WALLENBERG  
FOUNDATION FOR INTERNATIONAL  
SCIENTIFIC COLLABORATION**



SCAN ME

# STATE OF THE ART FULLY INTEGRATED SPECTROFLUOROMETER

- + Steady State Fluorescence
- + Fluorescence Lifetime (TCSPC)
- + Phosphorescence Lifetime (MCS)
- + NEW: MicroPL upgrade for spectral and time-resolved photoluminescence microscopy



## Sunday, Sept. 11

Room	RunAn	Palmstedt
3:00 PM - 5:00 PM	Registration - Entrance Level	
5:00 PM - 6:00 PM	Opening ceremony & -Keynote I Stefan Hell	
6:30 PM - 8:30 PM	Welcome Reception at Conference Venue	

## Monday, Sept. 12

Room	RunAn	Palmstedt
8:00 AM - 8:30 AM	Registration	
8:30 AM - 9:15 AM	Keynote II- Marina Kuimova	
9:20 AM - 10:20 AM	Invited talks 1 - Katja Heinze/ Jana Zaumseil	Invited talks 2 - Susan Cox/ Ichiro Hirao
10:20 AM - 10:50 AM	Coffee Break & visit to the Exhibition	
10:50 AM - 12:10 PM	Oral Session 1	Oral Session 2
12:10 PM - 12:25 PM	Horiba Sponsor Talk	
12:10 PM - 2:00 PM	Lunch & visit to the Exhibition I	
1:40 PM - 2:00 PM	Wiley Sponsor Talk	
2:00 PM - 3:00 PM	Invited talks 3 - Kai Johnsson / David Rueda	Invited talks 4 - Victoria Birkedal / Jörg Enderlein
3:00 PM - 3:30 PM	Coffee Break & visit to the Exhibition	
3:30 PM - 5:30 PM	Oral session 3	Oral session 4
5:45 PM - 7:15 PM	Poster Session I - Presented by Horiba Scientific	

## Tuesday, Sept.13

Room	RunAn	Palmstedt
8:30 AM - 9:15 AM	Keynote III - Xiaoliang Sunney Xie	
9:20 AM - 10:20 AM	Invited talks 5 - Andrey Klymchenko / Stefania Impellizzeri - PCCP Emerging Investigator Award, 2021	Invited talks 6 - Erwin Peterman / Jerker Widengren
10:20 AM - 10:50 AM	Coffee Break & visit to the Exhibition	
10:50 AM - 12:10 PM	Oral session 5	Oral session 6
12:10 PM - 12:25 PM	Picoquant Sponsor Talk	
12:10 PM - 2:00 PM	Lunch & visit to the exhibition including Poster Session II	
2:00 PM - 3:00 PM	Invited talks 7 - Julia Pérez-Prieto / Stephanie Kath-Schorr	Invited talks 8 - Achilles Kapanidis / Ben Schuler
3:00 PM - 3:30 PM	Coffee Break & visit to the Exhibition	
3:30 PM - 5:30 PM	Oral session 7	Oral session 8
7:30 PM - 11:30 PM	Conference Dinner at Elite Park Avenue Hotel	

## Wednesday, Sept. 14

Room	RunAn	Palmstedt
8:30 AM - 9:15 AM	Keynote IV -Paola Ceroni	
9:20 AM - 10:20 AM	Oral session 9	Oral session 10
10:20 AM - 10:50 AM	Coffee Break & visit to the Exhibition	
10:50 AM - 12:10 PM	Invited talks 9 - Fredrik Westerlund / Enrico Gratton	Invited talks 10 - Jacek Waluk / Joakim Andreasson
12:10 PM - 12:25 PM	Lumicks Sponsor Talk	
12:10 PM - 2:00 PM	Lunch & visit to the Exhibition	
1:45 PM - 2:00 PM	Mad City Labs Sponsor Talk	
2:00 PM - 2:45 PM	Keynote V - David Walt	
2:45 PM - 3:00 PM	Closing remarks, poster prize ceremony	



# Plenary speakers

## Paola Ceroni

Paola Ceroni is a full professor at the University of Bologna. In 1998 she obtained her PhD degree in Chemical Sciences at the University of Bologna, after a period in the United States (Prof. Allen J. Bard's laboratory). Her PhD thesis was awarded by the Semerano prize from the Italian Chemical Society. In 2015 she was visiting a scientist at the University of Pennsylvania (Prof. Vinogradov's laboratory, Philadelphia, US) for 3 months. Current research is focused on photochemistry and electrochemistry of



supramolecular systems with particular emphasis towards luminescent nanocrystals.

Her research on luminescent silicon nanocrystals

was funded by an ERC Starting Grant PhotoSi (2012-2017) and an ERC Proof of Concept SiNBiosys (2017-2019).

She is co-author of 200 scientific papers in refereed international journals. She is co-author of a book entitled: "Photochemistry and Photophysics: Concepts, Research, Applications" (2014, Wiley-VCH) and the editor of three books published by Wiley and Springer. She is fellow of the Royal Society of Chemistry, Associate Editor of Dalton Transactions and member of the Editorial Board of Chem. She has presented oral communications at more than 70 national and international conferences and 30 invited lectures at universities and research institutes abroad.

## Stefan Hell

Stefan Hell is a director at both the Max Planck Institute for Biophysical

Chemistry in Göttingen and the Max Planck Institute for Medical Research in Heidelberg, Germany.

Hell is credited with having conceived, validated and applied the first viable concept for overcoming Abbe's diffraction-limited resolution barrier in a light-focusing fluorescence microscope. For this accomplishment he has received numerous awards, including the 2014 Kavli Prize in Nanoscience and the Nobel Prize in Chemistry.

Stefan Hell received his doctorate (1990) in physics from the University of Heidelberg. From 1991 to 1993 he worked at the European Molecular Biology

Laboratory, followed by stays as a senior researcher at the University of Turku, Finland, between 1993 and 1996, and as a visiting scientist at the University of Oxford, England, in 1994. In 1997 he was appointed to the MPI for Biophysical Chemistry in Göttingen as a group leader, and was promoted to director in 2002. From 2003 to 2017 he also led a research group at the German Cancer Research Center (DKFZ). Hell holds honorary professorships in physics at the Universities of Heidelberg and Göttingen.

## Marina Kuimova

Marina Kuimova is a Reader (Associate Professor) at Imperial College London. Her current research is focused on elucidation of biologically relevant processes using different types of fluorescence imaging and time-resolved spectroscopy. She is a Fellow of the Royal Society of Chemistry and a member of the Editorial Board of Methods and



Applications of Fluorescence. She has received numerous awards and honors for her work, including 2011 Grammaticakis-Neumann Prize of the Swiss Chemical Society, 2009 Roscoe the Westminster Medals at the SET for Britain, UK Houses of Parliament; 2012 British Biophysical



Society Young Investigator Award, 2012 Royal Society of Chemistry Harrison-Meldola Prize, 2013 ChemComm Emerging Investigator Lectureship, and

the 2014 IUPAP C6 Young Scientist Prize in Biological Physics.

Marina obtained her Master's Degree at Moscow State University (Russia), and a doctorate at the University of Nottingham (UK) under the supervision of Professor M. W. George in 2006. Following a postdoctoral appointment with Professor David Phillips at Imperial, she became a group leader and an EPSRC Life Science Interface Fellow (in 2007) and an EPSRC Career Acceleration Fellow (in 2010). She was appointed as a lecturer in the department of Chemistry at Imperial in 2012 and promoted to a Readership in 2016.

## David Walt

David is a member of the faculty at Harvard Medical School in the



Department of Pathology, and a Howard Hughes Medical Institute Professor. He is the Scientific Founder of Illumina, Inc. and Quanterix Corp, and has co-founded several other

life sciences startups. Previously, he was a University Professor, Professor of Neuroscience, and Professor of Oral

Medicine at Tufts University. He is a member of the National Academy of Engineering, the National Academy of Medicine, a Fellow of the American Academy of Arts and Sciences, a Fellow of the American Institute for Medical and Biological Engineering, and a Fellow of the National Academy of Inventors. He has received numerous awards and honors, including the 2017 American Chemical Society Kathryn C. Hach Award for Entrepreneurial Success, the 2016 Ralph Adams Award in Bioanalytical Chemistry, the 2014 American Chemical Society Gustavus John Esselen Award, the 2013 Analytical Chemistry Spectrochemical Analysis Award, the 2013 Pittsburgh Analytical Chemistry Award, and the 2010 ACS National Award for Creative Invention. He received a B.S. in chemistry from the University of Michigan and a Ph.D. in chemical biology from SUNY at Stony Brook, and did postdoctoral studies at MIT.

## Xiaoliang Sunney Xie

Professor Xiaoliang Sunney Xie is an internationally renowned biophysical chemist, and the Lee Shau-kee professor of



Peking University. After a career at Pacific Northwest National Laboratory, he became the first tenured professor at Harvard University

among Chinese scholars who went to the US since the Reform in China. As a pioneer of single-molecule biophysical chemistry, coherent Raman scattering microscopy, and single-cell genomics, he made major contributions to the emergence of these fields. In particular, his inventions in single-cell genomics have been used in in vitro fertilization to benefit hundreds of couples in China by avoiding the transmission of monogenic diseases to their newborns.

# Invited speakers



**Ichiro Hirao**  
Institute of Bioengineering  
and Nanotechnology,  
Singapore



**Erwin Peterman**  
Vrije Universiteit  
Amsterdam, The  
Netherlands



**Achillefs Kapanidis**  
University of Oxford, UK



**Andrey Klymchenko**  
Université de Strasbourg,  
France



**Katja Heinze**  
Johannes Gutenberg-  
Universität, Germany



**Ben Schuler**  
University of Zurich,  
Switzerland



**Jana Zaumseil**  
Universität Heidelberg,  
Germany



**Enrico Gratton**  
UC Irvine, USA



**Jacek Waluk**  
Institute of Physical  
Chemistry, Polish  
Academy of Sciences,  
Poland.



**Jerker Widengren**  
Royal Institute of  
Technology (KTH), Sweden



**Jörg Enderlein**  
Georg August University,  
Germany



**Kai Johnsson**  
Max Planck Institute,  
Germany



**Victoria Birkedal**  
Aarhus University,  
Denmark



**Joakim Andreasson**  
Chalmers University of  
Technology, Sweden



**Fredrik Westerlund**  
Chalmers University of  
Technology, Sweden



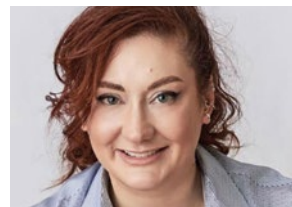
**David S. Rueda**  
Imperial College  
London, UK



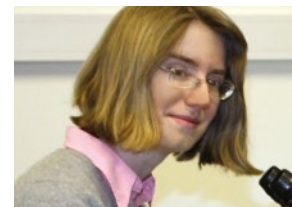
**Stephanie Kath-Schorr**  
University of Cologne,  
Germany



**Julia Pérez-Prieto**  
Institute of Molecular  
Science University of  
Valencia, Spain



**Stefania Impellizzeri**  
Toronto Metropolitan  
University, ON, Canada



**Susan Cox**  
King's College,  
London, UK



# Committees

## Main Organizers

Marcus Wilhelmsson (Chalmers)  
Bo Albinsson (Chalmers)

## Local Organizing Committee

Marcus Wilhelmsson (Chalmers)  
Bo Albinsson (Chalmers)  
Maria Abrahamsson (Chalmers)  
Joakim Andréasson (Chalmers)  
Karl Börjesson (Gothenburg University)  
Bengt Nordén (Chalmers)  
Fredrik Westerlund (Chalmers)  
Pernilla Wittung-Stafshede (Chalmers)

## MAF Permanent Steering Committee

Mario Berberan-Santos (Lisbon)  
David Birch (Strathclyde)  
Fred Brouwer (Amsterdam)  
Alexander Demchenko (Kiev)  
Alberto Diaspro (Genova)  
Michelle Digman (Irvine)  
Christian Eggeling (Jena)  
Ulrike Endesfelder (Pittsburgh)  
Martin Hof (Prague)  
Enrico Gratton (Irvine)  
Zygmunt Gryczynski (Fort Worth)  
Stefan Hell (Göttingen)

Johan Hofkens (Leuven)  
David Jameson (Honolulu)  
Anita Jones (Edinburgh)  
Clemens Kaminski (Cambridge)  
Guruswamy Krisnamoorthy (Mumbai)  
Joseph Lakowicz (Baltimore)  
Marcia Levitus (Tempe; AZ)  
Bin Liu (Singapore)  
Yves Mely (Strasbourg)  
Seung Bum Park (Seoul)  
Julia Pérez Prieto (Valencia)  
Jicun Ren (Shanghai)  
Ute Resch-Genger (Berlin)  
Catherine Ann Royer (Troy; NY)  
Markus Sauer (Würzburg)  
Suzanne Scarlata (New York)  
Martin Schnermann (Frederick; MD)  
Gerhard Schütz (Vienna)  
Claus Seidel (Düsseldorf)  
Trevor Smith (Melbourne)  
Keiji Suzuki (Yokohama)  
Yitzhak Tor (San Diego)  
Jacek Waluk (Warsaw)  
Jerker Widengren (Stockholm)  
Marcus Wilhelmsson (Göteborg)  
Paul Wiseman (Montreal)  
Thorsten Wohland (Singapore)  
Otto Wolfbeis (Regensburg)



# Venue

## Chalmers Conference Centre

The Chalmers Conference Center at Chalmersplatsen 1 is an ideal location for a medium size conference. The biggest room has a capacity of 450 people and is suited perfectly for big seminars. There are further rooms for smaller seminars or meetings. There are also big, vast spaces that can be used for exhibitions and networking.

## Visiting address

Chalmers Konferens & Restauranger  
Main entrance  
Chalmersplatsen 1  
412 58 Göteborg  
Sweden





# Social program

## Welcome reception

Date/Time: 11 Sep. 18.30-20:30

Location: Chalmers Johanneberg  
(Conference Venue)  
Address: Chalmersplatsen 1

The welcome reception is included in your registration but pre-registration is mandatory if you want to attend. The Welcome reception includes light mingle food and drinks. Welcome Reception is hosted by The municipality of Gothenburg and The Västra Götaland Region.



City of  
Gothenburg



REGION  
VÄSTRA GÖTALAND

## Conference dinner

Date/Time: 13 Sep. 19.30-23:30

Location: Elite Park Avenue Hotel  
Address: Kungssportsavenyn 36

The conference dinner is included in your registration, extra dinner tickets can be purchased for accompanying person. Pre-registration is mandatory if you want to attend. The event includes food, drinks and light entertainment.



# LUMINOSA

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# Sponsors and exhibition

## Diamond sponsors



## Gold sponsors



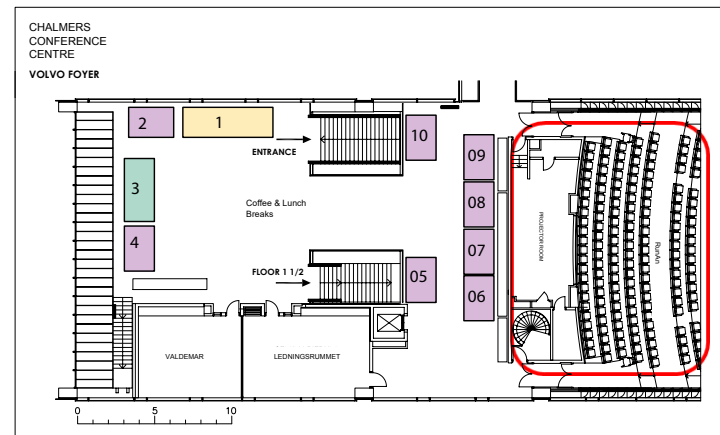
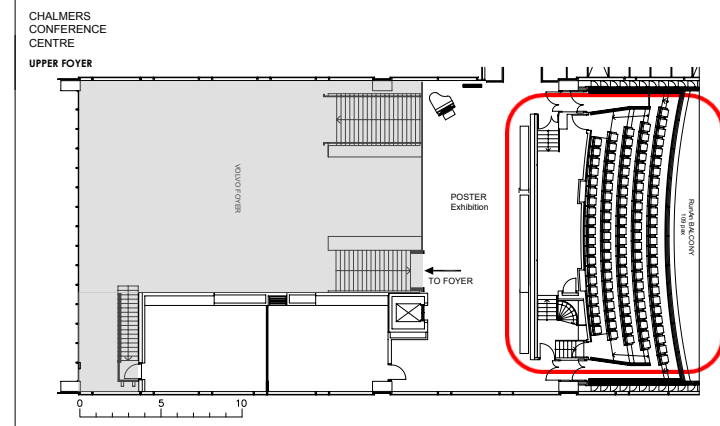
## Silver sponsors



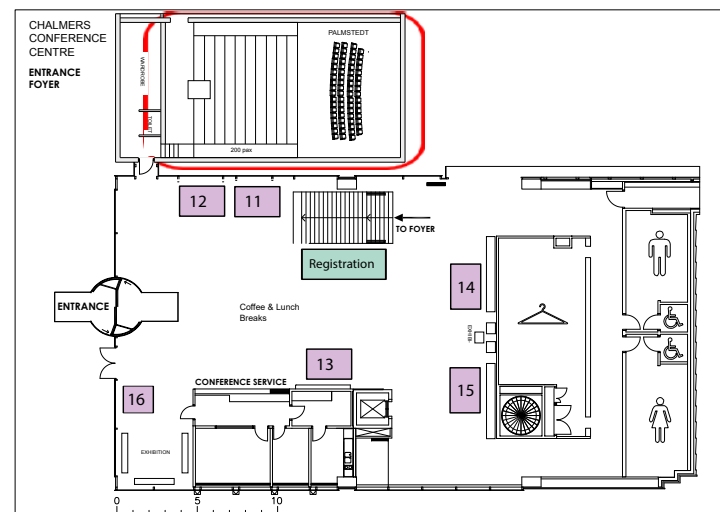
## Exhibitors



MAF<sup>20</sup><sub>22</sub>



- 1 Horiba Scientific
- 2 PCO
- 3 PicoQuant
- 4 Edinburgh Instruments
- 5 Mad City Labs
- 6 Swabian Instruments GmbH
- 7 Hamamatsu Photonics
- 8 ISS Inc.
- 9 Oxxius
- 10 Chroma Technologies
- 11 Thorlabs Sweden
- 12 Abberior Instruments
- 13 Topica Photonics
- 14 Lumicks
- 15 Hübner Photonics
- 16 4Photonics





# Keynote sessions

2022-09-11 - 17:00  
Opening ceremony & -Keynote I - RunAn

## MINFLUX and MINSTED provide molecule-scale resolution in fluorescence microscopy

Stefan Hell  
Max Planck Institute for Biophysical Chemistry  
Göttingen, Germany

2022-09-12 - 08:30  
Keynote II - RunAn

## Mapping microscopic viscosity and temperature using molecular rotors

Marina Kuimova  
Imperial College London  
London, United Kingdom

2022-09-13 - 08:30  
Keynote III - RunAn

## From Single-Molecule Enzymology and Gene Expression, to Single Cell Genomics

Xiaoliang Xie  
Peking University  
BEIJING, China

2022-09-14 - 08:30  
Keynote IV - RunAn

## Light-harvesting antennae: From principles to applications

Paola Ceroni  
University of Bologna  
Bologna, Italy

2022-09-14 - 14:00  
Keynote V - RunAn

## Ultrasensitive Digital Technologies for Measuring Proteins and Extracellular Vesicles

David Walt  
Harvard Medical School and Wyss Institute  
Boston, United States of America

# Invited talks

2022-09-12 - 09:20  
Invited talks O1 - RunAn

## Spin-Flip Emitters for Sensing, CPL and Upconversion

Katja Heinze  
Heidelberg University  
Heidelberg, Germany

## Fine-Tuning Near-Infrared Fluorescence from Semiconducting Carbon Nanotubes with Luminescent Defects

Jana Zaumseil  
Heidelberg University  
Heidelberg, Germany

2022-09-12 - 09:20  
Invited talks O2 - Palmstedt

## From images to information: enhancing resolution and improving accuracy in SMLM

Susan Cox  
Randall Centre for Cell & Molecular Biophysics, Faculty of Life Sciences & Medicine, King's College  
London, United Kingdom

## Imaging technology using functional nucleic acids by genetic alphabet expansion

Ichiro Hirao  
Institute of Bioengineering and Nanotechnology  
Singapore, Singapore

2022-09-12 - 14:00  
Invited talks O3 - RunAn

## Fluorescent synthetic probes for live-cell imaging

Kai Johnsson  
Max Planck Institute for Medical Research  
Heidelberg, Germany

## Search and Processing of Holliday Junctions within Long DNA by Junction-Resolving Enzymes

David Rueda  
Imperial College London  
London, United Kingdom

2022-09-12 - 14:00

## Invited talks O4- Palmstedt Control of conjugated polymer aggregation using DNA origami platforms

Victoria Birkedal  
Department of Chemistry and iNANO center, Aarhus University  
Aarhus, Denmark

## Metal and graphene induced energy transfer imaging

Jörg Enderlein  
3rd Institute of Physics, Georg August University  
Göttingen, Germany

2022-09-13 - 09:20  
Invited talks O5 - RunAn

## En route to bright probes for biosensing and bioimaging: from single dyes to dye-loaded nanoparticles

Andrey Klymchenko  
University of Strasbourg, Lab. Bioimaging and Pathologies, CNRS UMR 7021 Illkirch-Strasbourg, France

## Of MOFs and MEF: Hybrid Strategies for Enhanced Luminescent Materials

Stefania Impellizzeri  
Toronto Metropolitan University, Department of Chemistry and Biology  
Toronto, Canada

2022-09-13 - 09:20  
Invited talks O6 - Palmstedt

## A live, single-molecule view on intracellular transport in C. elegans chemosensory cilia

Erwin Peterman  
Vrije Universiteit Amsterdam  
Amsterdam, Netherlands

### Transient state (TRAST) spectroscopy and imaging of cellular and molecular states and conditions - exploiting the sensing side of fluorophore blinking kinetics

Jerker Widengren  
Royal Institute Of Technology  
Stockholm, Sweden

2022-09-13 - 14:00

Invited talks 07 - RunAn

### Expansion of the genetic alphabet for nucleic acid functionalization

Stephanie Kath-Schorr  
University of Cologne, Department of Chemistry  
Köln, Germany

### Exploring and investigating relevant features of lanthanide-based upconverting materials

Julia Perez-Prieto  
Universitat de Valencia  
Valencia, Spain

2022-09-13 - 14:00

Invited talks 08 - Palmstedt

### Unlocking transcription mechanisms via molecular movies along the reaction coordinate

Achillefs Kapanidis  
University of Oxford,  
Oxford, United Kingdom

### Interaction Dynamics of Intrinsically Disordered Proteins from Single-Molecule Spectroscopy

Ben Schuler  
University of Zurich  
Zurich, Switzerland

2022-09-14 - 10:50

Invited talks 09 - RunAn

### Nanofluidics for fluorescence microscopy-based single DNA molecule analysis

Fredrik Westerlund  
Division of Chemical Biology, Chalmers  
University of Technology  
Gothenburg, Sweden

### Title TBC

Enrico Gratton  
UC Irvine, USA

2022-09-14 - 10:50

Invited talks 10 - Palmstedt

### Fluorescence of porphycenes: the role of intramolecular hydrogen bonds

Jacek Waluk  
Institute of Physical Chemistry, Polish  
Academy of Sciences, Poland

### Controlling fluorescence in photochromic systems. From on-off switching to full-color reproduction.

Joakim Andréasson  
Chalmers University of Technology  
Goteborg, Sweden

## Oral sessions

2022-09-12 10:50

Oral Session 1 - RunAn

### Yb- and Er concentration dependence of the upconversion luminescence of highly doped NaYF<sub>4</sub>:Yb,Er/NaYF<sub>4</sub>:Lu core/shell nanocrystals

Presenter: Ute Resch-Genger

### New observation of direct triplet state excitation for tryptophan. Getting high initial anisotropy for phosphorescence.

Presenter: Zygmunt Gryczynski

### Donor-acceptor sensitizers for triplet-triplet annihilation upconversion

Presenter: Andrey Turshatov

### Spectroscopic Studies and Bioimaging of Eu(III) complexes with 1-azathioxanthone Derivatives

Presenter: Lea Nielsen

2022-09-12 10:50

Oral Session 2 - Palmstedt

### Fuzzy Supertertiary Interactions within PSD-95 Enable Ligand Binding

Presenter: Hugo Sanabria

### 3D Super-resolution Imaging of the Epigenome Using Enzyme-directed DNA Labelling

Presenter: Robert Neely

### Decorating bacteria with self-assembled synthetic receptors

Presenter: Leila Motiei

### Label-free mass and size characterization of single biomolecules

Presenter: Christoph Langhammer

2022-09-12 15:30

Oral session 3 - RunAn

### Multidimensional Fluorescence Spectroscopy of Wines

Presenter: Trevor Smith

### Circularly polarised luminescence laser scanning confocal microscopy to study live cell chiral molecular interactions

Presenter: Robert Pal

### Metabolic profiling and tracking phenotypic changes in mitochondria in cancer cells with Mitometer and the phasor approach to FLIM

Presenter: Michelle Digman

### Massively Parallel Fluorescence Correlation Spectroscopy Integrated with Fluorescence Lifetime Imaging Microscopy (mpFCS/FLIM) for the Characterization of Fast Dynamic Processes in Live Cells

Presenter: Vladana Vukojevic

### In-membrane protein oligomerization as a critical step for membrane pore formation

Presenter: Radek Sachl

### Spatiotemporally controlled generation of NTPs as a versatile tool for single-molecule studies

Presenter: Sebastian Deindl

2022-09-12 15:30

Oral session 4 - Palmstedt

### "Why do gangliosides form nanodomains": An old question answered by combining Monte-Carlo FRET with MD Simulations

Presenter: Martin Hof

### DNA-coated upconversion nanoparticles for sensitive nucleic acid FRET biosensing

Presenter: Niko Hildebrandt

### Breaking the Photo-Bleaching Limit in Single-Molecule FRET With DyeCycling

Presenter: Sonja Schmid

### Quantitative Quenchable FRET: A novel single-molecule fluorescence method for measuring distances below 3 nm

Presenter: Timothy Craggs

### ABEL-FRET enables tether-free and high-precision single-molecule FRET in solution

Presenter: Quan Wang



**Using Dark RET with optimized push-pull fluorene probe to minimize the background signal in DNA-PAINT microscopy**

*Presenter: Srijayee Ghosh*

2022-09-13 10:50

Oral session 5 - RunAn

**Fluorogenic probes for genetically-targeted imaging and sensing**

*Presenter: Blaise Dumat*

**Development of lipid droplet-specific fluorophores for cancer cell imaging**

*Presenter: Christine Dyrager*

**Fluorescent probes reveal the interfacial shear stress during the onset of macroscopic sliding**

*Presenter: Fred Brouwer*

**Applying styryl quinolinium fluorescent probes for imaging of ribosomal RNA in living cells**

*Presenter: Bilha Fischer*

2022-09-13 10:50

Oral session 6 - Palmstedt

**Fluorescence Lifetime Imaging of RNA in Single Cells using Bespoke Plasmonic Nanoparticles**

*Presenter: Yu Chen*

**Graphene/DNA Nanotech – a powerful tool for single-molecule fluorescence studies**

*Presenter: Izabela Kaminska*

**Fluorescence blinking: how does it really scale with ensemble averaging?**

*Presenter: Ivan Scheblykin*

**Synthetic fibrous hydrogels as a platform to decipher cell-matrix mechanoreciprocity**

*Presenter: Susana Rocha*

2022-09-13 15:30

Oral session 7 - RunAn

**Ligand-Directed Fluorescent Labelling for the study of Membrane Proteins by Fluorescence Correlation Spectroscopy**

*Presenter: Joelle Goulding*

**Triangulenium Dyes for Lifetime Based Imaging and Probes**

*Presenter: Bo W. Laursen*

**DNA and silver: key ingredients for bright near-infrared emitters**

*Presenter: Cecilia Cerretani*

**Photoswitchable Solvatochromic Dyes to Probe Membrane Ordering by RESOLFT Super-resolution Microscopy**

*Presenter: Andrew Frawley*

**Highly fluorescent J-aggregate nanoparticles and their bioimaging application**

*Presenter: Satoshi Habuchi*

**Dual Emissive Photonconvertible Fluorescent Probes Based on Directed Photooxidation Induced Conversion for Bioimaging Applications**

*Presenter: Dr Mayeul Collot*

2022-09-13 15:30

Oral session 8 - Palmstedt

**Imaging fluorescence correlation spectroscopy comes of age: direct camera access and machine learning for online data evaluation**

*Presenter: Thorsten Wohland*

**Rapid k-space image correlation measurements of actin diffusion and probe emission blinking kinetics in living cells**

*Presenter: Paul Wiseman*

**Microspectroscopic techniques for the detection of carbon nanoparticle pollution**

*Presenter: Maarten Roefsaers*

**Pulse-shaped broadband multiphoton excitation for single-molecule detection of fluorescent base analogues**

*Presenter: Steven Magennis*

**Elastic Turbulence and Macroscopic Waves in Micropillar Arrays**

*Presenter: Jonas Tegenfeldt*

**Cross-entropy driver single-molecule 3D tracking in E. coli**

*Presenter: Elias Amselem*

2022-09-14 09:20

Oral session 9 - RunAn

**Spectral multiplexing with photoswitchable probes**

*Presenter: Francesca Pennacchiotti*

**Exploiting Fluorescence Lifetime in Pulsed Interleaved MINFLUX**

*Presenter: Jonas Zähringer*

2022-09-14 09:20

Oral session 10 - Palmstedt

**Optimizing fluorophore formulations for luminescent concentrators**

*Presenter: Kenneth Ghiggino*

**Homo-FRET in cyclic systems: Theory and fluorescence anisotropy of homooxacalix[n]arenes (n = 3, 4) and calix[n]arenes (n = 4 to 8)**

*Presenter: Mario Berberan Santos*

**Photophysics of a fluorescent base analogue with high two-photon brightness**

*Presenter: Alexandra Bailie*

# pco.flim

## frequency domain fluorescence lifetime imaging system

**fluorescence lifetimes**  
from sub nanoseconds to hundred microseconds

**modulation signal integrated**  
5 kHz - 40 MHz

**high frame rate**  
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# Posters

## Poster Session 1

2022-09-12  
17:45

### P1-01

**Nucleic Acid Photolithography: both  
a Canvas and a Palette of Fluorescent  
Colors**  
Jory Lietard

### P1-02

**A Light in the Dark: Using Molecular  
Photophysics to Explore f-f Electronic  
Transitions**  
Nicolaj Kofod

### P1-03

**Towards a new Triggered Acrylamide  
Proximity probe for specific fluorogenic  
protein labeling**  
Kelvin Tsao

### P1-04

**Luminescent lanthanide nanoparticles  
for ultrasensitive Enzyme-linked  
immunosorbent Assay «ELISA»**  
Ali Kassir

### P1-04

**Luminescent lanthanide nanoparticles  
for ultrasensitive Enzyme-linked  
immunosorbent Assay «ELISA»**  
Ali Kassir

### P1-05

**Resolving photophysical properties  
of polyfluorene films using multi-  
dimensional fluorescence spectroscopy  
and imaging**  
Yang Xu

### P1-07

**Modulating TTA through control of high  
energy triplet states**  
Andrew Carrod

### P1-08

**Elongated silver nanoparticles  
as sensing platform for detecting  
photoactive proteins**  
Karolina Sulowska

### P1-09

**Metal-enhanced fluorescence of photo-  
switchable molecules**  
Martyna Jankowska

### P1-10

**nce based approach to study early  
stages of biomineralization steered by  
coral acid-rich proteins**  
Barbara Klepka

### P1-11

**Synthesis and Characterization of  
Emissive Benzothiadiazole-Au(I)-L  
Complexes**  
Mauricio Posada Urrutia

### P1-12

**Upconversion nanoparticles produced  
via the modest-temperature open-air  
PVP assisted route: tuning morphology,  
crystal structure, and emission  
properties.**  
Lewis Mackenzie

### P1-13

**Fluorescence analysis of carotenoids  
in the retina reveals the activity of an  
unknown photoprotective mechanism in  
the human eye**  
Rafal Luchowski



**P1-14**

**The integration of microfluidics and single-molecule tracking reveal polymer transport mechanisms in porous media**  
Maged Serag

**P1-15**

**Excitation energy management in photosynthesis - when less is more**  
Monika Zubik-Duda

**P1-16**

**Photoluminescence of up-conversion nanoparticles with high spatial resolution**  
Evangelos Sisamakís

**P1-17**

**Integration of a Superconducting Nanowire Detector into a Confocal Microscope**  
Evangelos Sisamakís

**P1-18**

**Nanobody-on-Quantum Dot Displacement Assay for Simple and**  
Ruifang Su

**P1-19**

**Quantum Dot to Fluorescent Protein Förster Resonance Energy Transfer (FRET) for Glucose Sensing.**  
Nour Fayad

**P1-20**

**Photophysical characterization of tzG, a fluorescent analogue of guanine**  
Olha Tkach

**P1-21**

**Fluorescence and immunoblotting: more data from one sample**  
Barbora Brodská

**P1-22**

**Antifungal Activity of Amphotericin B Bound to Albumin**  
Ewa Grela

**P1-23**

**Multimodal solid-state fluorescent pH/O<sub>2</sub> sensors for live cell analysis**  
Liang Li

**P1-24**

**Photosensitized lanthanide nanoprobe for (bio)sensing: from adapted designs to FRET based proofs-of-concept**  
Clémence Cheignon

**P1-25**

**Structural and mechanical characterization of new biomimetic materials**  
Johannes Vandaele

**P1-26**

**Live-cell functional Fluorescence Microscopy Imaging towards spatial mapping of biomolecular information**  
Sho Oasa

**P1-27**

**BrightSwitch®: A New Family of Dual Emissive Photoconvertible Fluorescent Probes for Bioimaging**  
Lazare Saladin

**P1-28**

**Spectroscopic Analysis of the Interaction of the Antibiotic Amphotericin B Conjugated with Silver Nanoparticles with Biomembranes**  
Sebastian Janik

**P1-29**

**Novel Tools to Label and Study Nucleic Acids In Vitro and in Cells**  
Pauline Pfeiffer

**P1-30**

**Intense photoluminescence from Cu doped CdSe nanotetrapods triggered by ultrafast hole capture**  
Fariyad Ali

**P1-31**

**A styryl-based probe for the detection of reactive oxygen and nitrogen species**  
Przemysław Siarkiewicz

**P1-32**

**nce Imaging Reveals that Hydrophobicity Provides Multivalency in UBQLN2 Liquid-Liquid Phase Separation**  
Eunha Gwak

**P1-33**

**GIGANTEA phase separation modulates ambient temperature-dependent flowering in Arabidopsis thaliana**  
Jinkwang Kim

**P1-34**

**The curious case of solvation dynamics in solvent-free liquid proteins**  
Tanuja Kistwal

**P1-35**

**Fluorescence correlation spectroscopy reveals diffusion coefficient of lipid nanodomain on the plasma membrane**  
Sejoo Jeong

**P1-36**

**A fluorescent PNA-merocyanine probe used for the detection of HER2 breast cancer mRNA marker in cancerous cell extract**  
Shirly Zisman Martinez

**P1-38**

**Entropic mixing - the way to a dye glass**  
Clara Schäfer

**P1-39**

**Cancer cells on the move: fluorescence microscopy to study the role of clathrin-mediated endocytosis in cancer metastasis.**  
Charlotte Cresens

**P1-40**

**Fluorescence monitoring of binding between a Schiff Base metal ion complex and Human Serum Albumin**  
Dipak Sahoo

**P1-41**

**Live-cell FCCS monitoring of AML-related proteins**  
Ale Holoubek

**P1-42**

**opic characterization of noncovalent porphyrin-graphene oxide characterization**  
Daria Larowska-Zarych

**P1-43**

**Fluorescent base analogues and optical tweezers - a new approach to modify and study the structure and dynamics of nucleic acids**  
Vinoth Edal Joseph Sundar Rajan

**P1-44**

**Photophysical Study of a Quadracyclic Uracil (qU) Analogue**  
Jagannath Kuchlyan

**P1-45**

**Unraveling protein-lipid interactions in live-cells with protein micropatterning**  
Marina Bishara

**P1-46**

**Diarylethene Isomerization Using Triplet-Triplet Annihilation Photon Upconversion**  
Wera Larsson

**P1-47**

**Elucidation of the effect of dopants and quenchers on the exciton dynamics of aqueous CdS quantum dots using complementary spectroscopic and microscopic approaches**  
Sharmistha Das

**P1-48**

**Probing the effect of the number of coupled molecules to a single**  
Rahul Bhuyan

**P1-49****2CNqA: A fluorescent base analogue for interbase FRET in DNA & RNA**

Anna Wypijewska del Nogal

**P1-50****3D super-resolution fluorescence microscopy on the immunological synapse**

Lukas Velas

**P1-51****Method for Determining Key Parameters in Photon Upconversion**

Fredrik Edhborg

**P1-52****New Optical Temperature Sensors based on TADF-Emitting Zirconium(IV) Pyridinedipyrrolole Complexes**

Andreas Russegger

**P1-53****Flow Virometer- Rapid detection of intact viruses**

Paz Drori

**P1-54****Photoswitchable PET-Quenching of Fluorescent Dyes for Super-Resolution Microscopy**

Kate Leslie

**P1-55****Combined single molecule tracking and atomic force microscopy to elucidate enzyme-induced collagen degradation kinetics**

Simon Jaritz

**P1-56****Description of the Properties of Artificial Membranes - a Combination of Fluorescence Spectroscopy and Dynamic Light Scattering**

Filip Mravec

**P1-57****Temperature dependence of gas-phase acetone photoluminescence under low pressure conditions at several excitation wavelengths**

Slaven Bajic

**P1-58****Influence of stress factors on the intrinsic fluorescence of *Cupriavidus necator***

Kateřina Marková

**P1-59****Wazaby: a water-soluble fluorescent platform for in vitro and in vivo molecular imaging and theranostics**

Ewen Bodio

**P1-60****Molecular rotors as tools to explore the mechanical behavior of lipid membranes under stress**

Miguel Paez-Perez

**P1-61****Microscope alignment using real-time Imaging FCS**

Daniel Ying Kia Aik

**P1-62****Fluorescence-based methods for antibiotic mode of action studies in living bacteria**

Ann-Britt Schäfer

**P1-63****Lifetime-Based Photoconversion of EGFP for 3D photostimulation in FLIM**

Petr Herman

**P1-64****In vivo protein-protein interactions studied by “3-color FRET-FLIM”**

Dita Strachotová

**P1-65****Towards background-free stimulated emission depletion nanoscopy**

Jong-Chan Lee

**P1-66****Impact of the number and position of NMe2 groups on the photophysical properties of aza-BODIPYs**

Wassima Tajani

**P1-67****Multiparameter time-resolved fluorescence spectroscopy of G-protein coupled receptor dynamics and interactions in live cells**

Katherina Hemmen

**P1-68****Does galectin-1 bind specifically to GM1?: a combination of fluorescence and QCM-D study on model lipid membrane**

Federica Scollo

**P1-69****An NMR study of the solvatochromism of Brooker's merocyanine dyes**

Natalie Pariente

**P1-70****Solvatochromic fluorescent probes for specific targeting and imaging of cell organelles**

Nathan Aknine

**P1-71****Correlation clustering allows the analysis of individual blinking grains in semiconductor's film**

Boris Louis

**P1-72****Optical DNA mapping-based de novo assembly of the *Schizosaccharomyces pombe* genome**

Luis Mario Leal Garza

**P1-73****Fluorescence lifetime microscopy for tracking interactions between extracellular vesicles and living cells.**

Ekaterina Lisitsyna

**P1-74****Effect of Disease-Associated Mutations on NMDA Receptor Activation Pathway: Single-Molecule FRET Study**

Vojtech Vyklicky

**P1-75****The sensitization effect of IR806 dye on lanthanide upconversion nanoparticles**

Haichun Liu

**P1-76****Phosphorescent porphyrin labels and bioconjugates for bioanalytical applications**

Rafael Di Lazaro Gaspar

**P1-77****Molecular Rotational Conformation Controls the Rate of Singlet Fission and Triplet Decay in Pentacene Dimers**

Rasmus Ringström

**P1-78****Unlocking Same-sign CPL: Understanding Solvent and Donor Effects in Europium(III) Complexes**

Davide De Rosa

**P1-79****Refractive Index Imaging as Sensing Platform with a Carbon-Based Semiselective Receptors for Drinking Water Analysis**

Patrick Recum

**P1-80****Single-molecule FRET experiments at MHz count rates with DNA origami nanoantennas**

Lennart Grabenhorst

**P1-81****Fluorescence Anisotropy – A powerful tool for the characterization of Biomass derived Fluorescent Carbon Nanodots**

Diogo Cartaxo Sousa



**P1-82**

**Laser-induced Changes in the Single Molecule Brightness of Blue Fluorescent Dyes**

Caroline Kopittke

**P1-83**

**Lanthanide-based time-resolved FRET: versatile application for biosensing**

Mariia Dekaliuk

**P1-84**

**Transient state (TRAST) flow cytometry for monitoring trans-cis isomerization kinetics of cyanine dye and dye-attached SUVs**

Baris Demirbay

**P1-85**

**VistaVision Toolbox for Quantitative Multi-Parameter Imaging and Analysis of Single Molecule Dynamics**

Eugene Povrozin

**P1-86**

**Membrane Curvature Dictates Attachment and Insertion of Amyloid Oligomer**

Vicky Vishvakarma

**P1-87**

**Allostery through DNA drives phenotype switching**

Gabriel Rosenblum

**Poster Session 2**

2022-09-13

12:10

**P2-01**

**Bacterial Typing using Optical DNA Mapping for Diagnostics of Clinical Infections**

Karolin Frykholm

**P2-02**

**Orientation of double-stranded DNA relative to graphene determined by single-molecule fluorescence lifetime microscopy**

Alan Marcelo Szalai

**P2-03**

**Fluorescence nanoscopy resolves rearrangements of SNARE and cargo proteins in platelets co-incubated with cancer cells.**

Chinmaya Venugopal Srambickal

**P2-04**

**Visible and NIR Emissive Lanthanide(III) Surfaces for New Luminescent Materials**

Elena Del Giorgio

**P2-05**

**Studies of dark, transient state transitions in near-IR cyanine fluorophores**

Hanie Esmaeeli

**P2-06**

**Ultrasensitive Detection of a Fluorescent Base Analogue Via Two-photon Excitation**

Henry Sansom

**P2-07**

**A Bright Match: High Lanthanide Content Meets Surface Protection via Bilayer Strategy – Small, Efficient, NIR-excitable Upconversion Probes for Bioapplications**

Alexandra Schroter

**P2-08**

**Modulation and phase-sensitive detection for emission of upconversion nanoparticles**

Niusha Bagheri

**P2-09**

**DyeCycling Breaks the Photobleaching Limit in Single-Molecule FRET**

Benjamin Vermeer

**P2-10**

**Highly sensitive detection of photosensitized singlet oxygen within hollow-core photonic crystal fibre**

Anita Jones

**P2-11**

**A FRET based DNA origami tool for particle curvature sensing**

Ece Büber

**P2-12**

**Probing DNA protein binding using single molecule fluorescence**

Moritz Burmeister

**P2-13**

**Plasma Membrane probes for live super resolution imaging based on Single Molecule Localization Microscopy**

Sonia Pfister

**P2-14**

**Effect of temperature on fluorescent and switching properties of**

Xingjie Fu

**P2-15**

**DNA origami tools for sensing and self-repair on the nanoscale**

Viktorija Glembockyte

**P2-16**

**A point of care system using fluorescence signal enhancement**

Renukka Yaadav

**P2-17**

**Merging photoswitches and two-photon active fluorophores: en route to the quartic dependence**

Carlos Benitez-martin

**P2-18**

**Single-molecule fluorescence microscopy using DNA origami nanopositioners for energy transfer studies on MXene flakes**

C. Lorena Manzanares

**P2-19**

**Bright light-harvesting nanoantenna with hydrophobic ion pairs**

Deep Sekhar Biswas

**P2-20**

**(Transient) absorption fluorescence microscopy**

Pavel Mal\_

**P2-21**

**Multifunctional nanomaterials for light-mediated cancer therapies**

Maria Bravo

**P2-22**

**3-Iminoindoline as a New Fluorescent Scaffold for Cell Imaging: Photophysical and Cellular Studies**

Susanne Doloczki

**P2-23**

**Monte Carlo simulations for the evaluation of oligomerization data in TOCCSL experiments**

Clara Bodner

**P2-24**

**Visualizing the impact of fluorescent labels on single DNA molecules by nanofluidic scattering microscopy**

David Albinsson

**P2-25**

**Detection of antimicrobial resistance genes in low-resource settings**

Moa Wranne

**P2-26**

**The other side of the fluorescent dyes – What are they doing when not emitting light?**

Peter Ebej

**P2-27**

**Impact of the Surface Coating of Upconversion Nanoparticles on their Photophysics, Stability, Cellular Uptake, and Toxicity to Endothelial Cells**

Thomas Hirsch

**P2-28**

**A quantitative structural map of the S. pombe kinetochore at the nanoscale**

Jannik Winkelmeier

**P2-29**

**Tuning ultra-bright fluorescent organic nanoparticles to**

Junsheng Chen

**P2-30**

**Measuring proton transfer rates in solution**

Rasmus Jakobsen

**P2-31**

**FRET SMILES Nanoparticles for Bioimaging**

Stine G. Stenspil

**P2-32**

**Polarization-resolved Second-harmonic generation of different proteins in the zebrafish embryo**

Bahar Asadipour

**P2-33**

**Multi-colour STED imaging with abberior STAR and abberior LIVE dyes**

Florian Grimm

**P2-34**

**New Reference Materials for Quantification and Standardization of Fluorescence-based Measurements**

Jutta Pauli

**P2-35**

**Investigation of carrier-free nano-prodrugs intracellular dynamics**

Farsai Taemaitree

**P2-38**

**Relationship between structure and photophysical properties of a NIR-emitting DNA-stabilized silver nanocluster**

Vanessa Rück

**P2-39**

**Kindling the lanthanide(III) ions: State-of-the-art broad application emission spectrometer enables the structure-property relationship of neodymium(III) ions in solution**

Patrick Nawrocki

**P2-40**

**Combined Steady State and Time-Resolved X-Ray Excited Luminescence Spectroscopy**

Maria Tesa

**P2-41**

**A-TEEM Molecular Fingerprinting: some successful application**

Alessia Quatela

**P2-42**

**Geometry-based DNA – protein hybrid nanostructures characterized by fluorescence**

Hajar Alzarrah

**P2-43**

**Novel 355nm (and Lower) Excitable and Tuneable Emission (Blue through Red) Fluorophores Utilised in Flow Cytometry**

Sareena Sund

**P2-44**

**Single Molecule Imaging of Damage Induced by DNA Crosslinking Agents**

Obed Aning

**P2-45**

**Probing Sub-Nano- to Millisecond Emission in a Single Measurement**

Mikkel Liisberg

**P2-46**

**Strategies for single-molecule protein identification using DNA exchange FRET**

Carlos De Lannoy

**P2-47**

**Towards in vivo Single Molecule Fluorescence Multiplexed Immuno Assays**

Abhinaya Anandamurugan

**P2-48**

**Two-photon Polymerization using Commercial Multiphoton Microscopes**

Arnoud Jongeling

**P2-49**

**Photo-induced Dark-State Depopulation in Reversible Switchable Fluorescent Proteins**

Guillem Marin-Aguilera

**P2-50**

**Triphenoxazoles: A Versatile Material with Applications as Biological Dyes and Organic Electronics**

Owen Jones

**P2-51**

**Fast Live 3D Imaging with 25-plane Camera Array Multifocus Microscopy**

Eduardo Hirata Miyasaki

**P2-52**

**Solution Structures of Neodymium(III) in the Phases of Hydrometallurgy**

Villads R. M. Nielsen

**P2-53**

**Image Reconstruction for live 3D Multifocus Super-Resolution Microscopy**

Eduardo Hirata Miyasaki

**P2-54**

**Impact of Symmetry in Eu(III) and Sm(III) Luminescence**

Sabina Svava Mortensen

**P2-55**

**Interaction of natamycin with model and yeast membranes studied by spectroscopy and label-free fluorescence imaging**

Maria Szomek

**P2-56**

**Native Chemical Ligation-Based Fluorescent Probes for Cysteine and Aminopeptidase N Using meso-thioester-BODIPY**

Siyong Cho

**P2-57**

**Chloride Sensitive Dyes for the Analysis of Concrete Degradation**

Karl Leonard Sterz

**P2-58**

**Characterization of GFP as a cryo SMLM probe.**

Montserrat López Martínez

**P2-59**

**Reproducing Adam Heller's work on lanthanide luminescence in seleniumoxychloride solutions**

Michelle Rix

**P2-60**

**2D heterostructures as a promising platform for single-molecule fluorescence studies**

Karolina Zielonka

**P2-62**

**Contribution of autofluorescence from intracellular proteins in multiphoton fluorescence lifetime imaging**

Monika Malak

**P2-63****A Fluorescence Microscopy Approach to Study Bacterial Stress Responses**

Margareth Sidarta

**P2-64****Cubistic pointillism - the art of making super resolution cost effective**

Ando Zehrer

**P2-65****Two-photon light-sheet fluorescence lifetime microscopy using a time-correlated single-photon counting array**

Graham Hungerford

**P2-66****White Light Generation Through L-Ascorbic Acid Templated Thermo-Responsive Copper Nanoclusters**

Shashi Shekhar

**P2-67****A fluorogenic far-red emitting molecular viscometer for ascertaining lysosomal stress in live cells and *Caenorhabditis elegans***

Akshay Silswal

**P2-68****Correlative STED and NanoSIMS imaging reveals the nature of protein turnover in stress granules of neuronal progenitor cells**

Stefania Rabasco

**P2-69****Intravital imaging of endo-lysosomal pH gradients in the kidney proximal tubule.**

Monika Kaminska

**P2-70****Characterization of Fluorescent Filovirus Pseudotypes**

Kerstin Seier

**P2-71****Chromophore interaction in a self-assembly organogel for triplet-triplet annihilation upconversion and singlet fission**

Deise Fernanda Barbosa De Mattos

**P2-72****Viewing fluorescent and bioluminescent markers in the whole mouse brain - from optical in vivo imaging to microscopy of cleared specimens**

Srecko Gajovic

**P2-73****Thienoguanosine as a non-perturbing fluorescent reporter for investigating rotational dynamics of DNA and DNA-protein complexes**

Dmytro Dziuba

**P2-74****Overcoming the limits of fluorescence anisotropy with reversibly switchable states**

Andrea Volpato

**P2-75****A new tool for time-resolved hyperspectral nano-imaging of up-conversion dynamics**

Ali Eftekhari

**P2-76****Extending the Universe of SMILES to “Every” Receptor and Adapting SMILES for Triplet Upconversion**

Andrew Olsson

**P2-77****Fluorescence studies of intermolecular interactions of proteins involved in regulation of gene expression**

Anna Nied\_wiecka

**P2-78****Integration of fluorescently labeled subunits into human RNA polymerase I for single-molecule FRET studies**

Andreas Schmidbauer

**P2-80****Hollow-Core Photonic Crystal Fibres for Label-Free Protein Analysis**

Jan Heck

**P2-81****Enhancing detection sensitivity by pulse sequence in surface plasmon coupled emission.**

Luca Ceresa

**P2-83****FRET labeling to capture highly structured RNAs in motion**

Esra Ahunbay

**P2-84****The Effect of Deconvolution and ROI Selection in Membrane Order Analysis Using Solvatochromic Fluorophores**

Ainsley Huang

**P2-85****A New Paradigm for Fluorescence Trace Manipulation to Reduce Artefacts in FCS Measurements**

Alex Seltmann



# Notes

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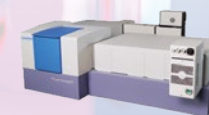
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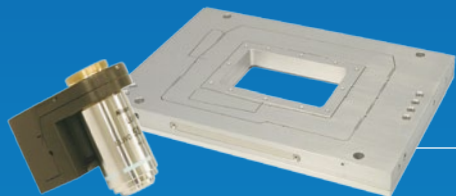
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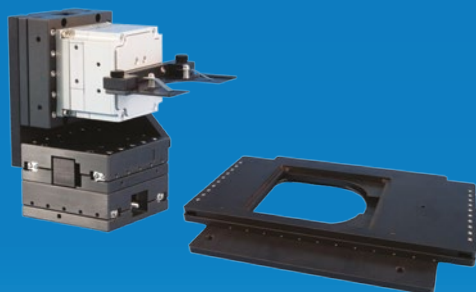
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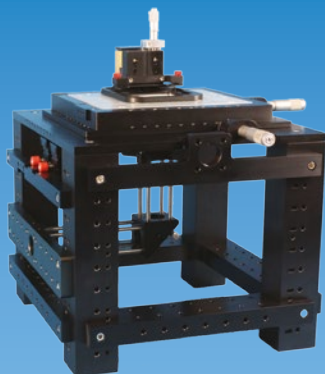
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