

#### E4.1 (G.U. Nienhaus)

- [E4.1:1] ‡ V. Adam, P. Carpentier, S. Violot, M. Lelimousin, C. Darnault, G.U. Nienhaus, and D. Bourgeois, *Structural Basis of Photobleaching in a Photoactivatable Green Fluorescent Protein*, [J. Am. Chem. Soc. 131, 18063 \(2009\)](#)
- [E4.1:2] ‡ V. Adam, H. Mizuno, A. Grichine, J. Hotta, Y. Yamagata, B. Moeyaert, G.U. Nienhaus, A. Miyawaki, D. Bourgeois, and J. Hofkens, *Data storage based on photochromic and photoconvertible fluorescent proteins*, [J. Biotechnol. 149, 289 \(2009\)](#)
- [E4.1:3] ‡ V. Adam, K. Nienhaus, D. Bourgeois, and G.U. Nienhaus, *Structural Basis of Enhanced Photoconversion Yield in Green Fluorescent Protein-like Protein Dendra2*, [Biochemistry 48, 4905 \(2009\)](#)
- [E4.1:4] N. Arhel, M. Lehmann K. Clauss, G.U. Nienhaus, V. Piguet, and F. Kirchhoff, *The Inability to Disrupt the Immunological Synapse between Infected Human T Cells and APCs distinguishes HIV-1 from most other Primate Lentiviruses*, [J. Clin. Invest. 119, 2965 \(2009\)](#)
- [E4.1:5] ‡ V.V. Breus, C.D. Heyes, K. Tron, and G.U. Nienhaus, *Zwitterionic Biocompatible Quantum Dots for Wide pH Stability and Weak Non-Specific Binding to Cells*, [ACS Nano 3, 2573 \(2009\)](#)
- [E4.1:6] P.N. Hedde, J. Fuchs, F. Oswald, J. Wiedemann, and G.U. Nienhaus, *Online image analysis software for photoactivation localization microscopy*, [Nature Methods 6, 689 \(2009\)](#)
- [E4.1:7] M. Helm, A.Y. Kobitski, and G.U. Nienhaus, *Single-molecule Förster Resonance Energy Transfer Studies of RNA Structure, Dynamics and Function*, [Biophys. Rev. 1, 161 \(2009\)](#)
- [E4.1:8] X. Jiang, J. Dausend, M. Hafner, A. Musyanovych, C. Röcker, K. Landfester, V. Mailänder, and G.U. Nienhaus, *Specific Effects of Surface Amines on Polystyrene Nanoparticles in Their Interactions with Mesenchymal Stem Cells*, [Biomacromolecules 11, 748 \(2010\)](#)
- [E4.1:9] ‡ M. Lelimousin, V. Adam, G.U. Nienhaus, D. Bourgeois, and M.J. Field, *Photoconversion of the Fluorescent Protein EosFP: A Hybrid Potential Simulation Study Reveals Intersystem Crossings*, [J. Am. Chem. Soc. 131, 16814 \(2009\)](#)
- [E4.1:10] ‡ S. Lutz, K. Nienhaus, G.U. Nienhaus, and M. Meuwly, *Ligand Migration between Internal Docking Sites in Photodissociated Carbonmonoxy Neuroglobin*, [J. Phys. Chem. B 113, 15334 \(2009\)](#)
- [E4.1:11] C. Röcker, M. Pötzl, F. Zhang, W.J. Parak, and G.U. Nienhaus, *Protein Monolayer Formation on Colloidal Nanoparticles: A Quantitative Fluorescence Study*, [Nature Nanotechnology 4, 577 \(2009\)](#)
- [E4.1:12] ‡ J. Wiedemann, F. Oswald, and G.U. Nienhaus, *Fluorescent Proteins for Live Cell Imaging: Opportunities, Limitations, and Challenges*, [IUBMB Life 61, 1029 \(2009\)](#)
- [E4.1:13] ‡ J. Fuchs, S. Boehme, F. Oswald, P.N. Hedde, M. Krause, J. Wiedemann, and G.U. Nienhaus, *A photoactivatable marker protein for pulse-chase imaging with superresolution*, [Nature Methods 7, 627 \(2010\)](#)
- [E4.1:14] \* T. Grossmann, S. Schleede, M. Hauser, M.B. Christiansen, C. Vannahme, C. Eschenbaum, S. Klinkhammer, T. Beck, J. Fuchs, G.U. Nienhaus, U. Lemmer, A.

- Kristensen, T. Mappes, and H. Kalt, *Low-threshold Conical Microcavity Dye Lasers*, [\*Appl. Phys. Lett.\* \*\*97\*\*, 063304 \(2010\)](#)
- [E4.1:15] P.N. Hedde and G.U. Nienhaus, *Optical Imaging of Nanoscale Cellular Structures*, [\*Biophys. Rev.\* \*\*2\*\*, 147 \(2010\)](#)
- [E4.1:16] ‡ B. Jahrasdörfer, A. Vollmer, S.E. Blackwell, J. Maier, K. Sontheimer, T. Beyer, B. Mandel, O. Lunov, K. Tron, G.U. Nienhaus, T. Simmet, K.-M. Debatin, G.J. Weiner, and D. Fabricius, *Granzyme B Produced by Human Plasmacytoid Dendritic Cells Suppresses T-Cell Expansion*, [\*Blood\* \*\*115\*\*, 1156 \(2010\)](#)
- [E4.1:17] X. Jiang, C. Röcker, M. Hafner, S. Brandholt, R.M. Dörlich, and G.U. Nienhaus, *Endo- and Exocytosis of Zwitterionic Quantum Dot Nanoparticles by Live HeLa Cells*, [\*ACS Nano\* \*\*4\*\*, 6787 \(2010\)](#)
- [E4.1:18] X. Jiang, S. Weise, M. Hafner, C. Röcker, F. Zhang, W.J. Parak, and G.U. Nienhaus, *Quantitative Analysis of the Protein Corona on FePt Nanoparticles formed by Transferrin Binding*, [\*J. R. Soc. Interface\* \*\*7\*\*, S5 \(2010\)](#)
- [E4.1:19] A.D. Lehmann, W.J. Parak, F. Zhang, Z. Ali, C. Röcker, G.U. Nienhaus, P. Gehr, and B. Rothen-Rutishauser, *Fluorescent-Magnetic Hybrid Nanoparticles Induce a Dose-Dependent Increase of the Pro-Inflammatory Response in Lung Cells in Vitro Correlated with Intracellular Localization*, [\*Small\* \*\*6\*\*, 753 \(2010\)](#)
- [E4.1:20] ‡ O. Lunov, T. Syrovets, C. Röcker, K. Tron, G.U. Nienhaus, V. Rasche, V. Mailänder, K. Landfester, and T. Simmet, *Lysosomal Degradation of the Carboxydextran Shell of Coated Superparamagnetic Iron Oxide Nanoparticles and the Fate of Professional Phagocytes*, [\*Biomaterials\* \*\*31\*\*, 9015 \(2010\)](#)
- [E4.1:21] ‡ O. Lunov, T. Syrovets, B. Bräuchele, X. Jiang, C. Röcker, K. Tron, G.U. Nienhaus, P. Walther, V. Mailänder, K. Landfester and T. Simmet, *The Effect of Carboxydextran-coated Superparamagnetic Iron Oxide Nanoparticles on c-Jun N-terminal Kinase-mediated Apoptosis in Human Macrophages*, [\*Biomaterials\* \*\*31\*\*, 5063 \(2010\)](#)
- [E4.1:22] G.U. Nienhaus, *The "Wiggling and Jiggling of Atoms" Leading to Excited-State Proton Transfer in the Green Fluorescent Protein*, [\*ChemPhysChem\* \*\*11\*\*, 971 \(2010\)](#)
- [E4.1:23] ‡ K. Nienhaus, P. Dominici, A. Astegno, S. Abbruzzetti, C. Viappiani, and G.U. Nienhaus, *Ligand Migration and Binding in Nonsymbiotic Hemoglobins of Arabidopsis thaliana*, [\*Biochemistry\* \*\*49\*\*, 7448 \(2010\)](#)
- [E4.1:24] ‡ K. Nienhaus, S. Lutz, M. Meuwly, and G.U. Nienhaus, *Structural Identification of Spectroscopic Substates in Neuroglobin*, [\*ChemPhysChem\* \*\*11\*\*, 119 \(2010\)](#)
- [E4.1:25] K. Nienhaus and G.U. Nienhaus, *Ligand Dynamics in Heme Proteins Observed by Fourier Transform Infrared-Temperature Derivative Spectroscopy*, [\*Biochim. Biophys. Acta\* \*\*1814\*\*, 1030 \(2011\)](#)
- [E4.1:26] A. Nierth, A.Y. Kobitski, G.U. Nienhaus, and A. Jäschke, *Anthracene-BODIPY Dyads as Fluorescent Sensors for Biocatalytic Diels-Alder Reactions*, [\*J. Am. Chem. Soc.\* \*\*132\*\*, 2646 \(2010\)](#)
- [E4.1:27] ‡ T.W. Quan, P.C. Li, F. Long, S.Q. Zeng, Q.M. Luo, P.N. Hedde, G.U. Nienhaus, and Z.-L. Huang, *Ultra-fast, High-precision Image Analysis for Localization-based Super Resolution Microscopy*, [\*Opt. Express\* \*\*18\*\*, 11867 \(2010\)](#)
- [E4.1:28] A. Riedinger, F. Zhang, F. Dommershausen, C. Röcker, S. Brandholt, G.U. Nienhaus, U. Koert, and W.J. Parak, *Ratiometric Optical Sensing of Chloride Ions with Organic*

*Fluorophore-Gold Nanoparticle Hybrids: A Systematic Study of Design Parameters and Surface Charge Effects*, [Small 6, 2590 \(2010\)](#)

- [E4.1:29] K. Dammertz, M. Hengesbach, M. Helm, G.U. Nienhaus, and A.Y. Kobitski, *Single-Molecule FRET Studies of Counterion Effects on the Free Energy Landscape of Human Mitochondrial lysine tRNA*, *Biochemistry* **50**, 3107 (2011)
- [E4.1:30] \* T. Grossmann, S. Schleede, M. Hauser, M.B. Christiansen, C. Vannahme, C. Eschenbaum, S. Klinkhammer, T. Beck, J. Fuchs, G.U. Nienhaus, U. Lemmer, A. Kristensen, T. Mappes, and H. Kalt, *Lasing in Dye-doped High-Q Conical Polymeric Microcavities*, *Proc. SPIE* **7913**, 79130Y (2011)
- [E4.1:31] X. Jiang, A. Musyanovych, C. Röcker, K. Landfester, V. Mailänder, and G.U. Nienhaus, *Specific effects of surface carboxyl groups on anionic polystyrene particles in their interactions with mesenchymal stem cells*, *Nanoscale* **3**, 2028 (2011)
- [E4.1:32] ‡ A.Y. Kobitski, M. Hengesbach, S. Seidu-Larry, K. Dammertz, C.S. Chow, A. van Aerschot, G.U. Nienhaus, and M. Helm, *Single-molecule FRET Reveals a Cooperative Effect of Two Methyl Group Modifications in the Folding of Human Mitochondrial tRNALys*, *Chem. Biol.* **18**, 928 (2011)
- [E4.1:33] ‡ O. Lunov, V. Zablotskii, T. Syrovets, C. Röcker, K. Tron, G.U. Nienhaus, and T. Simmet, *Modeling receptor-mediated endocytosis of polymer-functionalized iron oxide nanoparticles by human macrophages*, *Biomaterials* **32**, 547 (2011)
- [E4.1:34] O. Lunov, T. Syrovets, J. Beil, M. Delacher, K. Tron, G.U. Nienhaus, A. Musyanovych, V. Mailänder, K. Landfester, and T. Simmet, *Differential Uptake of Functionalized Polystyrene Nanoparticles by Human Macrophages and a Monocytic Cell Line*, *ACS Nano* **5**, 1657 (2011)
- [E4.1:35] ‡ J. Wiedenmann, C. D'Angelo, and G.U. Nienhaus, *Fluorescent Proteins: Nature's Colourful Gifts for Live Cell Imaging*, in *Fluorescent Proteins I - from Fundamental Research to Bioanalytics* (Jung, G., Ed.), Springer Verlag, Berlin; DOI: 10.1007/4243\_2011\_1021 (2011)
- [E4.1:36] R. Rieger, A. Kobitski, H. Sielaff, and G.U. Nienhaus, *Evidence of a Folding Intermediate in RNase H from Single Molecule FRET Experiments*, [ChemPhysChem](#) **12**, 627 (2011)
- [E4.1:37] R. Rieger and G.U. Nienhaus, *A Combined Single-molecule FRET and Tryptophan Fluorescence Study of RNase H Folding under Acidic Conditions*, *Chem. Phys. Lett.* **396**, 3 (2012)
- [E4.1:38] \* L. Shang, R.M. Dörlich, S. Brandholt, R. Schneider, V. Trouillet, M. Bruns, D. Gerthsen, and G.U. Nienhaus, *Facile preparation of water-soluble fluorescent gold nanoclusters for cellular imaging applications*, *Nanoscale* **3**, 2009 (2011)
- [E4.1:39] ‡ L. Shang, S. Dong, and G.U. Nienhaus, *Ultra-small Fluorescent Metal Nanoclusters: Synthesis and Biological Applications*, *Nano Today* **6**, 401 (2011)
- [E4.1:40] \* L. Shang, N. Azadfar, F. Stockmar, W. Send, V. Trouillet, M. Bruns, D. Gerthsen, and G.U. Nienhaus, *One-pot Synthesis of Near-infrared Fluorescent Gold Clusters for Cellular Fluorescence Lifetime Imaging*, *Small* **7**, 2614 (2011)
- [E4.1:41] P. Maffre, F. Amin, W.J. Parak, K. Nienhaus, and G.U. Nienhaus, *Characterization of Protein Adsorption onto FePt Nanoparticles using Dual-focus Fluorescence Correlation Spectroscopy*, *Beilstein J. Nanotechnol.* **2**, 374 (2011)

- [E4.1:42] ‡ K. Nienhaus, E. Nickel, C. Lu, S.-R. Yeh, and G.U. Nienhaus, *Ligand Migration in Human Indoleamine-2,3 Dioxygenase*, IUBMB Life **63**, 153 (2011)
- [E4.1:43] ‡ S.A. Wacker, C. Alvarado, G. von Wichert, U. Knippschild, J. Wiedenmann, K. Clauss, G.U. Nienhaus, H. Hameister, B. Baumann, T. Borggrefe, W. Knöchel, and F. Oswald, *RITA/C12ORF52, a Novel Modulator of Notch Signalling that Regulates Neurogenesis via Nuclear Export of RBP-J*, [EMBO J. 30, 43 \(2011\)](#)
- [E4.1:44] ‡ J. Wiedenmann, S. Gayda, V. Adam, F. Oswald, K. Nienhaus, D. Bourgeois, and G.U. Nienhaus, *From EosFP to mIrisFP: structure-based development of advanced photoactivatable marker proteins of the GFP-family*, J. Biophotonics, **6** 377 (2011)
- [E4.1:45] ‡ A. Grabrucker, M.J. Knight, C. Proepper, J. Bockmann, M. Joubert, M. Rowan, G.U. Nienhaus, C.C. Garner, J.U. Bowie, M.R. Kreutz, E.D. Gundelfinger, and T.M. Boeckers, *Concerted Action of Zinc and ProSAP/Shank in Synaptogenesis and Synapse Maturation*, [EMBO J. 30, 569 \(2011\)](#)
- [E4.1:46] M. Hagn, K. Sontheimer, T. Beyer, O. Lunov, K. Tron, E. Schwesinger, T. Syrovets, T.F.E. Barth, D. Fabricius, G.U. Nienhaus, T. Simmet, and B. Jahrasdörfer, *Human B Cells Differentiate into Granzyme B-secreting Cytotoxic B Lymphocytes upon Incomplete T Cell Help*, Immunol. Cell Biol. **90**, 457 (2012)
- [E4.1:47] ‡ G.U. Nienhaus, K. Nienhaus, and J. Wiedenmann, *Structure-Function Relationships in Fluorescent Marker Proteins of the GFP Family*, in *Fluorescent Proteins I - from Fundamental Research to Bioanalytics* (Jung, G., Ed.), Springer Verlag, Berlin (2012), pp. 241-264
- [E4.1:48] ‡ J. Helbing, M. Devereux, K. Nienhaus, G.U. Nienhaus, P. Hamm, and M. Meuwly, *Temperature Dependence of the Heat Diffusivity of Proteins*, J. Phys. Chem. A **116**, 2620 (2012)
- [E4.1:49] K. Nienhaus, F. Zosel, and G.U. Nienhaus, *Ligand Binding to Heme Proteins: A Comparison of Cytochrome c Variants with Globins*, J. Phys. Chem. B **116**, 12180 (2012)
- [E4.1:50] A. Lutz, J. Paul, A. Bornstedt, G.U. Nienhaus, P. Etyngier, P. Bernhardt, W. Rottbauer, and V. Rasche, *Volumetric Motion Quantification by 3D Tissue Phase Mapped CMR*, J. Cardiovasc. Magn. Reson. **14**, 74 (2012)
- [E4.1:51] \* L. Shang, S. Brandholt, F. Stockmar, V. Trouillet, M. Bruns, and G.U. Nienhaus, *Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters*, Small **8**, 661 (2012)
- [E4.1:52] O. Lunov, T. Syrovets, C. Loos, G.U. Nienhaus, A. Musyanovych, V. Mailänder, K. Landfester, M. Rouis, and T. Simmet, *Amine Functionalized Polystyrene Nanoparticles Activate the NLRP3 Inflammasome in Human Macrophages*, ACS Nano **5**, 9648 (2011)
- [E4.1:53] G.U. Nienhaus, *A Fatigue-resistant Photoswitchable Fluorescent Protein for Optical Nanoscopy*, Angew. Chem. Int. Ed. **51**, 1312 (2012)
- [E4.1:54] S. Kraut, D. Bebenroth, A. Nierth, A.Y. Kobitski, G.U. Nienhaus, and A. Jäschke, *Three Critical Hydrogen Bonds Determine the Catalytic Activity of the Diels-Alderase Ribozyme*, Nucleic Acids Res **40**, 1318 (2012)
- [E4.1:55] ‡ T. Wang, J. Bai, X. Jiang, and G.U. Nienhaus, *Cellular Uptake of Nanoparticles by Membrane Penetration: A Study Combining Confocal Microscopy with FTIR Spectroelectrochemistry*, ACS Nano **6**, 1251 (2012)

- [E4.1:56] A. Brodehl, P.N. Hedde, M. Dieding, A. Fatima, V. Walhorn, S. Gayda, T. Saric, B. Klauke, J. Gummert, D. Anselmetti, M. Heilemann, G.U. Nienhaus, and H. Milting, *Dual Color Photoactivation Localization Microscopy of Cardiomyopathy-Associated Desmin Mutants*, *J. Biol. Chem.* **287**, 16047 (2012)
- [E4.1:57] \* L. Shang, and G.U. Nienhaus, *Gold Nanoclusters as Novel Optical Probes for in Vitro and in Vivo Fluorescent Imaging*, *Biophys. Rev.* **4**, 313 (2012)
- [E4.1:58] \* L. Shang, R.M. Dörlich, S. Brandholt, N. Azadfar, and G.U. Nienhaus, *Facile Synthesis of Fluorescent Gold Nanoclusters and Their Application in Cellular Imaging*, *Proc. SPIE* **8232**, 82321J (2012)
- [E4.1:59] L. Treuel and G.U. Nienhaus, *Toward a Molecular Understanding of Nanoparticle-Protein Interactions*, *Biophys. Rev.* **4**, 137 (2012)
- [E4.1:60] \* L. Shang, L. Yang, F. Stockmar, R. Popescu, V. Trouillet, M. Bruns, D. Gerthsen, and G.U. Nienhaus, *Microwave-Assisted Rapid Synthesis of Luminescent Gold Nanoclusters for Sensing  $Hg^{2+}$  in Living Cells Using Fluorescence Imaging*, *Nanoscale* **4**, 4155 (2012)
- [E4.1:61] \* L. Shang, R.M. Dörlich, V. Trouillet, M. Bruns, and G.U. Nienhaus, *Ultrasmall Fluorescent Silver Nanoclusters: Protein Adsorption and its Effects on Cellular Responses*, *Nano Research* **5**, 531 (2012)
- [E4.1:62] S. Gayda, K. Nienhaus, and G.U. Nienhaus, *Mechanistic Insights into Reversible Photoactivation in Proteins of the GFP Family*, *Biophys. J.* **103**, 2521 (2012)
- [E4.1:63] H.M. Rapp, S. Bacher, A. Ahrens, W. Rapp, B. Kammerer, G.U. Nienhaus, and W. Bannwarth, *Attachment of Proteins to Surfaces by Fluorous-Fluorous Interactions Restoring Their Structure and Activity*, *ChemPlusChem* **77**, 1066 (2012)
- [E4.1:64] P.N. Hedde, R.M. Dorlich, R. Blomley, D. Gradl, E. Oppong, A.C. Cato, and G.U. Nienhaus, *Stimulated emission depletion-based raster image correlation spectroscopy reveals biomolecular dynamics in live cells*, *Nat. Commun.* **4**, 2093 (2013)
- [E4.1:65] D. Hühn, K. Kantner, C. Geidel, S. Brandholt, I. De Cock, S.J.H. Soenen, P.R. Gil, J.M. Montenegro, K. Braeckmans, K. Mullen, G.U. Nienhaus, M. Klapper, and W.J. Parak, *Polymer-Coated Nanoparticles Interacting with Proteins and Cells: Focusing on the Sign of the Net Charge*, *ACS Nano* **7**, 3253 (2013)
- [E4.1:66] A.Y. Kobitski, S. Schafer, A. Nierth, M. Singer, A. Jaschke, and G. U. Nienhaus, *Single-Molecule FRET Studies of RNA Folding: A Diels-Alderase Ribozyme with Photolabile Nucleotide Modifications*, *J. Phys. Chem. B* **117**, 12800 (2013)
- [E4.1:67] Y.M. Li, Y. Ishitsuka, P.N. Hedde, and G.U. Nienhaus, *Fast and Efficient Molecule Detection in Localization-Based Super-Resolution Microscopy by Parallel Adaptive Histogram Equalization*, *ACS Nano* **7**, 5207 (2013)
- [E4.1:68] M. Mahmoudi, A.M. Abdelmonem, S. Behzadi, J.H. Clement, S. Dutz, M.R. Ejtehadi, R. Hartmann, K. Kantner, U. Linne, P. Maffre, S. Metzler, M.K. Moghadam, C. Pfeiffer, M. Rezaei, P. Ruiz-Lozano, V. Serpooshan, M.A. Shokrgozar, G.U. Nienhaus, and W.J. Parak, *Temperature: The "Ignored" Factor at the NanoBio Interface*, *ACS Nano* **7**, 6555 (2013)
- [E4.1:69] G.U. Nienhaus, P. Maffre, and K. Nienhaus, *Studying the Protein Corona on Nanoparticles by FCS*, in: *Fluorescence Fluctuation Spectroscopy*, ed. by S.Y. Tetin (San Diego: Elsevier Academic Press Inc, 2013), 115

- [E4.1:70] L. Shang, and G.U. Nienhaus, *Small fluorescent nanoparticles at the nano-bio interface*, Mater. Today 16, 58 (2013)
- [E4.1:71] L. Treuel, X. Jiang, and G.U. Nienhaus, *New views on cellular uptake and trafficking of manufactured nanoparticles*, J. R. Soc. Interface **10**, 20120939 (2013)
- [E4.1:72] L.X. Yang, L. Shang, and G.U. Nienhaus, *Mechanistic aspects of fluorescent gold nanocluster internalization by live HeLa cells*, Nanoscale **5**, 1537 (2013)
- [E4.1:73] Y. Klapper, M. Vraneanu, Y. Ishitsuka, D. Evans, D. Scheider, G.U. Nienhaus, and G. Lenewelt, *Surface energy of phospholipid bilayers and the correlation to their hydration*, J. Colloid Interface Sci. **390**, 267 (2013)
- [E4.1:74] K. Nienhaus and G.U. Nienhaus, *Fluorescent proteins for live-cell imaging with super-resolution*, Chem. Soc. Rev. **43**, 1088 (2014)

### **Invited Talks at International Conferences**

*Single-molecule Fluorescence Studies of RNA Folding and Function*, 1<sup>st</sup> Workshop on Molecular Kinetics, Berlin (Germany), 2009

*Advanced Fluorescent Proteins for Optical Nanoscopy*, Workshop of the Nanosciences Foundation, Grenoble (France), 2009

*Single-molecule Fluorescence Studies of RNA Folding and Function*, Workshop on the Function and Dynamics of Biomolecules 2009, Kavli Institute for Theoretical Physics China at the Chinese Academy of Sciences (KITPCCAS), Beijing (China), 2009

*Advanced Fluorescent Proteins for Photoactivation Localization Microscopy*, DFG Workshop "Watching the Cellular Nanomachinery at Work: New Developments in Super-Resolution and Single-Molecule Microscopy", New York (U.S.A), 2009

*Single-molecule Fluorescence Studies of RNA Folding and Function*, DPG Spring Meeting, Regensburg (Germany), 2010

*Novel Fluorescent Proteins for Optical Nanoscopy*. First Joint Meeting of the Swedish and German Biophysical Societies: Dynamics, Function, and Design of Biological Macromolecules, Hünfeld, Rhön (Germany), 2011

*Quantitative Fluorescence Microscopy of Nanoparticles Interacting with Proteins and Cells*. International Conference on Biological Responses to Nanoscale Particles, Essen (Germany), 2011

*Optical Nanoscopy with Photoactivatable Fluorescent Proteins*. Trends in Microscopy 2011: New Advances in Fluorescence Imaging and Fluorescent Probes, Biocenter, Julius-Maximilians-University Würzburg (Germany), 2011

*Pulse-chase Imaging with Super-resolution using mIrisFP*. 17<sup>th</sup> International Biophysics Congress (IUPAB), Beijing (China), 2011

*Fluorescence Microscopy Studies of Biomolecular Processes on the Nanoscale*. 3<sup>rd</sup> Symposium on Nanobiology, Weizmann Institute of Science, Rehovot (Israel), 2011

*Fluorescence Microscopy of Biomolecular Processes on the Nanoscale*.

Symposium Celebrating the 10<sup>th</sup> Anniversary of the CFN, Karlsruhe (Germany), 2011

*Optical Nanoscopy of Biomolecular Structure and Dynamics.*  
Chemistry (GdCh) Colloquium, TU Dortmund University (Germany) 2012.

*Quantitative Fluorescence Studies of Nanoparticles Interacting with Proteins and Cells*  
*NRP 64: Opportunities and Risks of Nanomaterials.*  
1st Progress Report Meeting, Berne (Switzerland) 2012.

*Quantitative Fluorescence Studies of Nanoparticles Interacting with Proteins and Cells*  
German-Russian Conference on Fundamentals and Applications of Nanoscience, Berlin  
(Germany) 2012.

*Optical Nanoscopy of Biomolecular Structure and Dynamics*  
Biophysical Colloquium, University of Kaiserslautern (Germany) 2012.

*Quantitative Fluorescence Microscopy of Nanoparticles Interacting with Proteins and Cells*  
18th PicoQuant Workshop, Berlin (Germany) 2012.

*Optical Nanoscopy with Novel Fluorescent Protein Markers*  
Annual Meeting of the German Biophysical Society, Göttingen, Germany, 2012.

*Quantitative Fluorescence Microscopy of Nanoparticles Interacting with Proteins and Cells*  
Abbott Laboratories, Abbott Park (Illinois, USA) 2012.

*Exploring Biomolecular Dynamics by Spectroscopy and Microscopy*  
Retreat Heidelberg Biophysics, Pforzheim Hohenwart, Germany, 2013.

*Advanced Fluorescence Microscopy for Biomolecular Structure and Dynamics*  
Joint Meeting of the British and German Biophysical Societies, Hünenfeld, Germany, 2013.

*Quantitative Fluorescence Microscopy of Nanoparticles Interacting with Proteins and Cells*  
Workshop of the CODATA-VAMAS Joint Working Group on the Description of Materials on the Nanoscale, ICSU Headquarters, Paris, France, 2013

*Quantitative Fluorescence Studies of Nanoparticles interacting with Proteins and Cells*  
European Summit for Clinical Nanomedicine (CLINAM) 2013, Basel, Switzerland.

*Optical Nanoscopy of (Bio-)Molecular Structure and Dynamics*  
539<sup>th</sup> Wilhelm and Else Heraeus Seminar, Bad Honnef, Germany, 2013.

*Optical Nanoscopy of Biomolecular Structure and Dynamics*  
Heidelberg Institute for Theoretical Studies (HITS), Heidelberg, Germany, 2013.

*Optical Nanoscopy of Biomolecular Structure and Dynamics*  
14th International Symposium on Electroanalytical Chemistry (ISEAC), Changchun, China, 2013

*Optical Nanoscopy of Biomolecular Structure and Dynamics*  
EMBO Short Course, KIT, Karlsruhe 2013

Quantitative Fluorescence Studies of Nanoparticles interacting with Proteins and Cells  
Summer School of the DFG Priority Program SPP 1313, Bad Boll, Germany 2013.

*Optical Nanoscopy of (Bio-)Molecular Structure and Dynamics*  
Colloquium of the Institute of Nanotechnology (INT), KIT, Karlsruhe, Germany 2013.

*Optical Nanoscopy of Biomolecular Structure and Dynamics*  
Physical Chemistry Colloquium, Bonn, Germany 2013.