Monday, October 13th

11h30-12h30		Registration
12h30-14h00		*Lunch - Restaurant La Ruche*
14h-14h15	Organizers	Workshop Introduction

Session 1: Color Centers in Nanodiamonds — *Chair: M. Fujiwara*

14h15-14h50	**O. Shenderova**	**Next-generation fluorescent nanodiamond for biological quantum sensing**
14h50-15h10	V. Pugliese	Fabrication and opto-physical characterization of Magnesium-Vacancy color centers in nanodiamonds
15h10-15h30	S. Potocky	Scalable synthesis of SiV-doped nanodiamonds via bottom-up and top-down CVD approaches
15h30-15h50	M. de Feudis	Controlled HPHT annealing of SiV-doped nanodiamonds at SOLEIL synchrotron: structural and optical investigations
15h50-16h20		*Coffee Break*

Session 2: Advanced Characterizations & Surface Chemistry — *Chair: O. Shenderova*

16h20-16h55	**A. Chemin**	**Advanced characterizations of nanodiamonds by synchrotron-based techniques**
16h55-17h15	J.C. Arnault	Extreme surface chemistry of isolated nanodiamonds probed by synchrotron X-ray photoemission
17h15-17h35	M. Dubois	Fluorination: a smart approach to designing high-value sp^3 carbon-based nanomaterials: diamane and ultrapure nanodiamonds
17h35-17h55	M. Finas	Nanodiamond band gap engineering: towards visible range photo activity

Tuesday, October 14th

Session 3: Nanodiamonds for Energy — *Chair: A. Chemin*

9h-9h35	**V. Guglielmotti**	**Gold and Silver Decorated Nanodiamond are multifunctional nanoparticles for generating solvated electrons**
9h35-9h55	D. Trucchi	Nanodiamond Technologies for High-Temperature Concentrated Solar Cells
9h55-10h15	A. Bellucci	Laser nanotextured diamond for sunlight conversion
10h15-10h35	H. Girard	Optimizing Nanodiamond Colloidal Suspensions: The Role of Surface Chemistry and Sonication Processes
10h35-11h00		*Coffee Break*

Session 4: Quantum Sensing — *Chair: Y. Y. Hui*

11h00 – 11h35	**Q. Li**	**Spatially resolved temperature sensing in working electrochemical devices by nanodiamond quantum sensors**
11h35-11h55	M. Techer	Thermal mapping of heterogeneous materials using NV centers in highly doped nanodiamonds.
11h55-12h15	B. Anezo	Sensing with NV- nanodiamonds : a spin active molecule and a metallic effect case
12h15-12h35	G. Jacopin	Time-Resolved Thermal Sensing using Nanodiamond Cathodoluminescence Spectroscopy
12h35-14h30		*Lunch - Restaurant La Ruche*

Session 5: Posters — *Details on the right*

14h30-16h00		Poster Session
16h00-16h30		*Coffee Break*

Session 6: Synthesis of Nanodiamonds — *Chair: S. Orlanducci*

16h30-16h50	A. Hoffman	Nanodiamond films formation from energetic species
16h50-17h10	S. Prasanna	Bottom-up production of nanodiamonds using MW microplasma
17h10-17h30	J. Jeevan	Improved gas phase nucleation of nanodiamonds with argon addition
17h30-17h50	R. Salerno	Etching of Nanodiamond Seeds during Early CVD Growth: Size-Dependent Modeling and Implications for Ultrathin Diamond Film Engineering
19h00-21h00		*Conference Dinner*

Wednesday, October 15th

Session 7: Sensing & Bioapplications I — *Chair: Q. Li*

9h-9h35	**M. Fujiwara**	**12C enriched Fluorescent Nanodiamonds for biomedical quantum sensing applications**
9h35-9h55	B. Grimaud	Measuring axonal transport using neurotropic fluorescent nanodiamonds
9h55-10h15	M.-O. David	Nanodiamond Conjugates for Tracking Disease-Linked RNA-Binding Proteins
10h15-10h35	G. Urbinati	Fluorescent Nanodiamond-based delivery systems for mitochondrial targeting of bioactive molecules
10h35-11h00		*Coffee Break*

Session 8: Sensing & Bioapplications II — *Chair: F. Treussart*

11h00 – 11h35	**Y.Y. Hui**	**Nanodiamond Scintillator: A Novel Approach to Profiling EUV and Soft X-ray Beams for Photolithography**
11h35-11h55	S. Sofia	Surface tuning of nanodiamonds: investigating the impact of surface modifications for applications in radiosensitization
11h55-12h15	W. Yingke	Precision Engineering of Immunocellular States via Intracellular Fever with Nanodiamond Composites
12h15-12h35	B. Ercolani	Hybrid Nanozyme Systems based on Gold-Decorated Nanodiamonds for Advanced Electrochemical Sensing and SERS substrate.
12h35-12h45	Organizers	Workshop Concluding Remarks
12h45-14h30		*Lunch - Restaurant La Ruche*

Poster Session (Tuesday 14h30 – 16h00)

A. Kaga	Characterization of diamond electrodes with H-terminated N-doped nanolayers on B-doped films for CO_2 reduction by electrochemical impedance spectroscopy
D. Stanicki	Engineering Nanodiamonds for Enhanced EPR Imaging: Influence of Size, Surface Chemistry, and Paramagnetic Properties
Y. Bouaouni	Surface-Modified Nanodiamonds for Enhanced Photocatalytic Hydrogen Generation
A. Abi	Optical Communication via Rabi Oscillations in NV Center Ensembles
V. Guglielmotti	Conversion of textile microfibers into nanodiamonds by HF-CVD
T.X. Guo	Revealing the Factors of Broadening Potential Windows of Diamond Electrodes by Redox-active Additives
C. Hareau	Studying optically-induced magnetic fields by NV scanning microscopy under optical excitation
J.M. Layet	Boron- and phosphorus-doped diamond: modification of the electronic structure after exposure to a low-pressure deuterium plasma and its effect on the production of negative ions
B. Malemo	Surface Functionalization of Nanodiamonds with NV Centers as a Platform for Bioimaging and Sensing
Y.X. Tang	Ultrathin Fluorescent Nanodiamond Films for Quantum Sensing in Semiconductor Devices
M. Tavakkoli	Localized Intracellular Thermometry Using NV Centers in Nanodiamonds with Gold Nanoparticle heaters: From Simulation to Experimental
N. Vaast	New theoretical method to design quasi-atomic systems in the band gap of semiconductors by combining density functional theory and the Hubbard effective Hamiltonian: Applications to alpha boron and to the nitrogen-vacancy center in diamond
O. Guillois	High Spectral Resolution Resonant Photoluminescence Excitation Spectroscopy of two Native Self-Interstitial Complexes in Electron-Irradiated Diamond