CURRICULUM VITAE

Personal data:

Name: Eduard Miloglyadov

Birthday: 01.11.1972

Nationality: Russian

Family status: Married, 3 children

Postal address: Bächlerstrasse 56, 8046 Zurich

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Education:

18 February 2004	Defence at S. I. Vavilov State Optical Institute. Thesis subject: "Wavefront transformations by dynamical $\chi^{(2)}$-holograms recorded with the Object and Reference Waves of different frequencies". Scientific advisers: Member of Russian Academy of Science Prof. Yu. N. Denisyuk and Prof. Dr. D. I. Staselko. PhD degree was awarded.
Sent. 2000 – July 2001	Graduate Student at St. Petersburg State University on the program: "Informational Systems and Computer Networks on the basis of Internet Technologies". The Master degree was awarded.
Nov. 1997 – February 2000	Post-graduate student at the Faculty of Physics of St. Petersburg State University (Department of Optics), St. Petersburg, Russia.
Oct. 1994 - January 1997	Graduate student at the Faculty of Physics of St. Petersburg State University (Department of Optics), St. Petersburg, Russia. Subject: "Dynamical hologram recording in the CdF_2:Ga crystals with metastable centers". Scientific adviser: Prof. Dr. D. I. Staselko. Degree of the Master of Science was awarded.
Sept. 1990 - July 1994	Undergraduate student at the Faculty Physics of St.-Petersburg State University (Department of Optics), St.-Petersburg, Russia. Graduation work at the Faculty of Physics of St.-Petersburg State University (Department of Optics), St.-Petersburg. Subject: "Methods of the

polychromatic holography". Scientific adviser: Prof. Dr. A.O.Morozov. Bachelor degree was awarded.

Job history:

May.2004 – until now	Postdoctoral researcher in the group of prof. Martin Quack at the Physical-chemistry department of ETH Zurich
2000 – May.2004	Research fellow in the S. I. Vavilov State Optical Institute, Laboratory of Physics of the holography processes. St. Petersburg, Russia.
May. 1995-2000	Junior research fellow, S.I.Vavilov State Optical Institute, Laboratory of Physics of the holography processes

Awards:

In 1999-2000 acad. N.A.Terenin research grant and State scientific grant for Young Scientists in the field of physics and astronomy was awarded.

In 2001-2003 acad. V.P.Linnik research grant was awarded.

Competences

•Professional experience of work with:

- pump-probe techniques for investigation of the ultra-fast molecular energy transfer especially intramolecular vibrational energy redistribution in the ground state of the molecules;

- REMPI technique;

- Molecular beam technique;

- high vacuum equipment;

- time of flight mass spectrometers;

-cryogenic equipment;

- laser equipment including service and tuning of the optical part:

continuous lasers: He-Ne- lasers Argon-ion laser

nanosecond lasers (YAG laser of Li, Continuum and Spectra-Physics), Dye lasers

femtosecond laser systems: Clark-MXR Femtosesond system CPA-1000, fiber laser,

Difference Frequency Generators(DFG), OPO ,OPA for femto- (TOPAS) and nanosecond range(Scanmate OPPO).

- all kind of the electronic and optical equipment for physical experiment including construction and work with the optical schemes in **THz, IR(10μ)-UV(190 nm)** range.

- Grating and FTIR Spectrometers (Bruker).

- ***Computer knowledge*:**

- Computer data acquisition and processing;

- HTML, MatLab, C, Fortran programming;

- Operating systems: Linux, MS Windows XP.

- Software: Origin, MatLab, MathCad, Tex, Corel, Photoshop, MS Office;

- Quantum chemistry calculations with Gaussian.

- ***Languages*:** English (read, written, spoken), German (read, spoken, moderate written), Russian

Publications:

1. High sensitivity femtosecond gas phase pump-probe experiments using a hollow waveguide: intramolecular redistribution processes in CH_3I. V.Krylov, A.Kushnarenko, E.Miloglyadov, M.Quack and G.Seyfang. //Proc. of SPIE Vol. 6460, p.64601D-1, (2007).
2. Fast Redistribution of Vibrational Energy in Methyl Iodides. V.Krylov, A.Kushnarenko, E.Miloglyadov, M.Quack, G.Seyfang. //Chimia, V.60, Issue 7/8, p.460, (2006)
3. Spectral shifts of UV femtosecond pulses in near-boundary areas of nonlinear Kerr medium controlled by IR radiation. Krylov, V. N.; Bespalov, V. G.; Staselko, D. I.; Lobanov, S. A.; Miloglyadov, E. V.; Seyfang, G. Izvestiya Rossiiskoi Akademii Nauk, Seriya Fizicheskaya (2005), 69(8), 1127-1128. Publisher: Nauka
4. Spectral Features of the Interaction of Femtosecond Light Pulses of Different Frequencies near the Boundary of a Kerr Medium. Krylov, V. N.; Bespalov, V. G.; Stasel'ko, D. I.; Lobanov, S. A.; Miloglyadov, E. V.; Seyfang, G. Optics and Spectroscopy (2005), 99(5), 798-802. Publisher: Pleiades Publishing, Inc.
5. Transformation of Images upon Dual-Frequency Recording and Reading at Sum Frequencies of Dynamic $\chi^{(2)}$-Holograms Using Spherical Reference Waves. Stasel'ko, D. I.; Miloglyadov, E. V.; Denisyuk, Yu. N. Optics and Spectroscopy (2005), 98(1), 140-147. Publisher: MAIK Nauka/Interperiodica Publishing

6. Dynamic Recording of $\chi^{(2)}$-Holograms with Multifrequency Object and Reference Waves. Stasel'ko, D. I.; Miloglyadov, E. V.; Denisyuk, Yu. N.; Sizov, V. N. Optics and Spectroscopy (2005), 98(1), 131-139. Publisher: MAIK Nauka/Interperiodica Publishing
7. $\chi^{(2)}$-holographic instantaneous image formation using multifrequency object and reference beams. Yuri N. Denisyuk, E. V. Miloglyadov, V. N. Sizov, D. I. Staselko. Proc. SPIE Vol. 5135, p. 100-106, 2003
8. Effective room-temperature broad-band recording of 3-D dynamic holograms in CdF_2:Ga crystals. Miloglyadov, E. V.; Ryskin, A. I.; Stasel'ko, D. I.; Shcheulin, A. S.; Kliment'ev, S. I.; Sventsitskaya, N. A. Vavilov. Optics and Spectroscopy (Translation of Optika i Spektroskopiya) (2002), 92(1), 120-124. Publisher: MAIK Nauka/Interperiodica Publishing
9. Dynamic hologram recording in a CdF_2-Ga crystal with metastable centers. Shcheulin, A. S.; Miloglyadov, E. V.; Ryskin, A. I.; Stasel'ko, D. I.; Buchinskaya, I. I.; Fedorov, P. P.; Sobolev, B. P. Vseross.Nauchn.Tsentr " Optics and Spectroscopy (1998), 84(3), 521-527. Publisher: MAIK Nauka
10. Mechanisms of writing and decay of holographic gratings in semiconducting CdF_2:Ga. Ryskin, A. I.; Shcheulin, A. S.; Miloglyadov, E. V.; Linke, R. A.; Redmond, I.; Buchinskaya, I. I.; Fedorov, P. P.; Sobolev, B. P. Journal of Applied Physics (1998), 83(4), 2215-2221. Publisher: American Institute of Physics