

Curriculum Vitae

Adam W Januszko, PhD
Vanderbilt University
Chemistry Department
Nashville, TN 37235

Education:

Master of Science in Chemistry in 1990 in Military University of Technology, Warsaw Poland,
Ph.D. in Physical Chemistry in 1999 in Institute of Physical and Theoretical Chemistry, Wroclaw University of Technology, Wroclaw, Poland.

Science experience:

Master of Science thesis: *Study of nematic phase created from smectic compounds*.
Three years experience in Prof. Roman Dabrowski's lab (1988-1990); one patent, three publications.

PhD dissertation entitled: *Optical properties of liquid crystals as materials for optical transformation of information* involved to nonlinear optics of liquid crystals.
Seven years experience in Prof. Andrzej Miniewicz's lab (1993-1999); one patent, eight publications.

Leader of project in dosimetry: *Liquid crystal system behavior under Gamma radiation*;
Military Academy of Land Forces, Wroclaw, Poland (1999-2001).

Military career:

1990 –1993 platoon leader;
1993-1996 instructor and since 1996 to 1999 lecturer in The Military Academy of Military Engineering, Wroclaw, Poland;
Since 1999 to 2004 professor assistant in Chemistry on The Military Engineering Department of Land Forces Military Academy, Wroclaw, Poland;

NATO exercises and trainings participation: 1995 Spessart – Germany; 1997 Cooperative Nugget – USA; 1998 Baltic Challenge – Lithuania, 1999 Barents Peace – Norway; 2001 Allied Effort – Poland;

Awarded and decorated with, among others:
the Bronze Medal "Armed Forces in the Service of the Country", 1999;
the Bronze Medal "Merit for Defense of the Country", 2003;

Retired from the Army on the rank of Major since 2004.

Awards: the 3rd prize of the Rector of the Military University of Technology in 1990; Golden Key Award from International Institute of Innovators during exhibition "From science to Industry: Poland at The London International Inventions Fair in 1997, the 1st prize of Rector of The Land Force Military Academy in 2000.

Post-Doc position:

Chemistry Department,
Vanderbilt University, Nashville TN,
Dr Piotr Kaczynski's Group.
03/01/02 –08/30/2003 and 06/01/2004 - 02/28/2005

Publications

1. **Januszko, Adam**; Kaszynski, Piotr; Wand, Michael D.; More, Kundalika M.; Pakhomov, Serhii; O'Neill, Matthew. *Three-ring mesogens containing p-carboranes: characterization and comparison with the hydrocarbon analogs in the pure state and as additives to a ferroelectric mixture.* Journal of Materials Chemistry (2004), 14(10), 1544-1553.
2. Ohta, Kiminori; **Januszko, Adam**; Kaszynski, Piotr; Nagamine, Takashi; Sasnouski, Genadz; Endo, Yasuyuki. *Structural effects in three-ring mesogenic derivatives of p-carborane and their hydrocarbon analogues.* Liquid Crystals (2004), 31(5), 671-682.
3. Grudniewski, Tomasz; Parka, Janusz; Dabrowski, Roman S.; **Januszko, A.**; Miniewicz, Andrzej. *Diffraction efficiency in dye-doped LC cells under low frequency AC voltage.* Proceedings of SPIE-The International Society for Optical Engineering (2002), 4759 (Liquid Crystals: Chemistry, Physics, and Applications), 298-302.
4. Grudniewski, T.; Parka, J.; Dabrowski, R.; **Januszko, A.**; Miniewicz, A. *Investigations of the diffraction efficiency in dye-doped LC cells under low frequency a.c. voltage.* Opto-Electronics Review (2002), 10(1), 11-15.
5. Miniewicz, A.; Sikorski, P.; **Januszko, A.**; Bartkiewicz, S.; Parka, J.; Kajzar, F. *Optical image correlators based on nematic liquid crystals.* MCLC S&T, Section B: Nonlinear Optics (2000), 25(1-4), 213-218.
6. **Januszko, Adam**; Sloma, Marian; Pellowski, Witalis. *Use of liquid crystal systems for military dosimetric measurements.* Biuletyn - Wojskowy Instytut Chemii i Radiometrii (1999), 1(29) 129-136.
7. Parka, Janusz; Miniewicz, Andrzej; **Januszko, A.**; Reznikov, Yuri A.; Dabrowski, Roman S.; Stolarz, Zofia. *Influence of nematic liquid crystal with dye and cell construction parameters on dynamic holographic grating formation.* Proceedings of SPIE-The International Society for Optical Engineering (2000), 4147 (Liquid Crystals), 335-339.
8. Parka, Janusz; **Januszko, A.**; Miniewicz, Andrzej; Zmija, Jozef. *Holographic grating formation mechanism in dye-doped nematic liquid crystal thin layer under dc electric field.* Proceedings of SPIE-The International Society for Optical Engineering (2000), 4147 (Liquid Crystals), 330-334.

9. Miniewicz, A.; Bartkiewicz, S.; **Januszko, A.**; Parka, J. *Nematic liquid crystals as media for real-time holography*. Journal of Inclusion Phenomena and Macrocyclic Chemistry (1999), 35(1-2), 317-325.
10. Miniewicz, Andrzej; Parka, Januz; Bartkiewicz, Stanislaw; **Januszko, Adam**. *Liquid crystals as materials for real-time holographic optical devices*. Pure and Applied Optics (1998), 7(2), 179-189.
11. Miniewicz, A.; **Januszko, A.**; Sikorski, P.; Parka, J. *Studies of self-diffraction of light in twisted nematic liquid crystal*. Proceedings of SPIE-The International Society for Optical Engineering (1998), 3318 (Liquid Crystals: Physics, Technology and Applications), 414-417.
12. A. Miniewicz, J. Parka, S. Bartkiewicz, **A. Januszko**, *Pure and Applied Optics*, **6**, 1, (1997).
13. **Januszko, A.**; Miniewicz, A. *Self-diffraction studies in a-Se-nematic liquid crystal cell*. Advanced Materials for Optics and Electronics (1996), 6(5&6), 272-278.
14. Bartkiewicz, S.; **Januszko, A.**; Miniewicz, A.; Parka, J. *Dye-doped liquid crystal composite for real-time holography*. Pure and Applied Optics (1996), 5(6), 799-809.
15. Czuprynski, K.; **Januszko, A.** *Preparation of nematic mixtures from smectic compounds*. Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (1992), 215 199-204.

Conference Presentations:

1. Ringstrand, Bryan; Vroman, Jacob; Jensen, Dell W.; Kaszynski, Piotr; **Januszko, Adam**. *Comparative Studies of Four-ring mesogens Containing p-Carborane, Bicyclo[2.2.2]octane, Cyclohexane and Benzene*. Abstracts, 36th Great Lakes Regional Meeting of the American Chemical Society, Peoria, IL, United States, October 17-20 (2004).
2. A. Miniewicz, P. Sikorski, **A. Januszko**, S. Bartkiewicz, J. Parka and F. Kajzar, *Optical Image Correlators Based on Nematic Liquid Crystals*, 5th International Conference on Organic Nonlinear Optics, March 12-16 Davos, Switzerland, Book of Abstracts, Zurich, March 2000.
3. Miniewicz, A.; Bartkiewicz, S.; **Januszko, A.**; Turalski, W. *Dye-doped liquid crystal for real-time holography*. NATO ASI Series, Series 3: High Technology (1997), 24 (Electrical and Related Properties of Organic Solids), 323-337.
4. Miniewicz, A.; Bartkiewicz, S.; **Januszko, A.**; Parka, J. *Dye-doped liquid crystal for real-time holography: nematic reorientation induced by photoconductivity*. NATO ASI Series, Series 3: High Technology (1996), 9 (Photoactive Organic Materials), 487-500.
5. A. Miniewicz, S. Bartkiewicz, **A. Januszko**, J. Parka, in Kajzar et al. *Kluwer Academic Publishers*, NATO ASI Series, 3, **9**, 487 (1996).

Patents:

1. R. Dabrowski, K. Czuprynski, **A. Januszko**, „*Nematic liquid crystal composition containing mainly smectic compounds*”, *Patent RP* nr. 163134, (1994).
2. S. Bartkiewicz, R. Dabrowski, **A. Januszko**, A. Miniewicz, J. Parka, „*Liquid crystal converter for holographic optical information processing*”, Polish Patent - RP. P-326960, (1998).