

Name: Vladimira Novotna

Affiliation: *Institute of Physics of the Czech Academy of Sciences (CAS), Prague, Czech Republic (CZ)*

Academic training

1992: **PhD.** degree in Condensed Matter, Institute of Physics, CAS, Prague, CZ.

1985: **MSc.** degree in Biophysics and Chemical Physics, Charles University, Prague, CZ.

Current position:

Since 2012: /full-time/- **Head of Liquid Crystal Group**, Institute of Physics, CAS, Prague, CZ.

Previous positions and appointments

Since 2016: **regional representative** at Board of Directors of International Liquid Crystals Society

Since 2008: /full-time/- **senior researcher**, Institute of Physics, CAS, Prague, CZ.

2008: **visiting researcher**, Institute of Physical Chemistry, University of Stuttgart, Germany.

2001: /full-time/- **visiting researcher**, Chemistry Department, Warsaw University, Poland.

1995-2008: /full-time/- **research assistant/ researcher**, Institute of Physics, CAS, Prague, CZ.

1991: /full-time/- **visiting researcher**, Vienna University, Austria.

Research Achievements (and h-index & citations)

V. Novotna is a senior researcher and the Head of the Liquid Crystal Group at the Institute of Physics of the Czech Academy of Sciences in Prague. V. Novotna's research expertise and experience is related to liquid crystalline compounds and their physical properties, mainly liquid crystalline (LC) compounds with dipole ordering, LC monomers and/or polymers.

She is an expert in new hybrid nanocomposites (organic liquid crystalline, preferentially ferroelectric LCs) with anorganic nanoparticles (magnetic, ferroelectric, metallic and/or semiconducting) as well as in measurement and interpretation of optical, calorimetric, dielectric and/polar properties of different types of LC compounds and hybrid systems.

Grants and awards: several national and EU projects as principal investigator (for. ex. H2020 FET-Open MAGNELIQ (2021-24), CSF 18-14497S (2018-20), CSF P204/11/0723 (2011-14), MEYS MEB 050818 (2008-09), MEYS LTC19051 (2019-22), etc.).

Member of the editorial board of journal Liquid Crystals (Taylor and Francis) from 2016,

<https://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=tlct20>

Member of the International Advisory Board of International Liquid Crystal Conference

<https://www.ilcc2024.com/>

She has co-authored ~**149** research publications at international peer-reviewed journals, receiving ~**2050** citations (**h-index 25**).

Publication Record – 5 most relevant publications during the last 5 years

1. V. Novotná, V. Hamplová, L. Lejček, D. Pocięcha, M. Cigl, L. Fekete, M. Glogarová, L. Bednárová, P. Majewski, E. Gorecka. Organic nanotubes created from mesogenic derivatives. *Nanoscale Adv.* 1 (2019) 2835. Doi: 10.1039/c9na00175a. [IF-5.59]
2. A. Poryvai, M. Šmahel, M. Švecová, A. Nemati, S. Shadpour, P. Ulbrich, T. Ogolla, J. Liu, V. Novotná, M. Veverka, J. Vejpravová, T. Hegmann, M. Kohout. Chiral, magnetic, and photosensitive liquid crystalline nanocomposites based on multifunctional nanoparticles and achiral liquid crystals. *ACS Nano* 16 (2022) 11833. Doi: 10.1021/acsnano.1c10594. [IF-18.50]
3. N. Podoliak, M. Cigl, V. Hamplová, D. Pocięcha, V. Novotná. Multichiral liquid crystals based on terphenyl core laterally substituted by chlorine atom. *J. Mol. Liq.* 336 (2021) 116267. Doi: 10.1016/j.molliq.2021.116267. [IF-6.63]
4. J. Malinčik, M. Kohout, J. Svoboda, S. Stulov, D. Pocięcha, Z. Bohmova, V. Novotná. Photochromic spiropyran-based liquid crystals. *J. Mol. Liq.* 346 (2022) 117842. Doi: 10.1016/j.molliq.2021.117842. [IF-6.63]
5. M. Šmahel, A. Poryvai, Y. Xiang, D. Pocięcha, T. Troha, V. Novotná, J. Svoboda, M. Kohout. Photosensitive bent-core nematic liquid crystals with various linking units in the side arms: Structure-properties relationships. *J. Mol. Liq.* 306 (2020) 112743. doi: 10.1016/j.molliq.2020.112743. [IF-5.07]