István Jánossy

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Professional Preparation

Lóránd Eötvös University (Budapest)	Physics	M.A.Sc.	1968
Hungarian Academy of Sciences (Budapest)	Physics	Candidate's degree	1980
Hungarian Academy of Sciences (Budapest)	Physics	D.Sc.	1996

Appointments

1996 - present	Scientific Advisor, Research Institute for Solid State Physics and Optics, Budapest
1981 - 1996	Senior Research Fellow, Research Institute for Solid State Physics, Budapest
1971 - 1981	Research Associate, Research Institute for Solid State Physics, Budapest
1968 - 1971	Research Associate, Technical Research Institute, Budapest

Long-term visits

1995 – 1996	Napier University, Edinburgh, Scotland
1984 - 1986	Herriott - Watt University, Edinburgh, Scotland
1980	Paul Pascal Research Institute, Talance, France
1975 - 76	Laboratoire de Physique des Solids, Orsay, France

Activity

<u>Presentations</u>: Authored over 80 scientific papers in international journals, that where cited more than 1450 times. Edited a book "Optical Effects in Liquid Crystals", published By Kluwer Academic Publishers. Participated in about 30 international conferences, where he delivered over 30 presentations.

<u>Educational Outreach</u>: He has delivered a course on "Optical Properties of Condensed Matter" at the Eotvos Lorand University at Budapest and at the Jozsef Attila University at Szeged.

<u>Service to Scientific community</u>: Chairman of 'Optics of Liquid Crystals' 93 (Siófok, Hungary 1993) conference and member of the organizing committee of '15th International Liquid Crystal Conference' (Budapest, 1994). Member of Scientific Advisory Board of the *Optics of Liquid Crystals* conferences. Regular reviewer of *Appl. Phys. Lett., Mol. Cryst. Liq. Cryst., Phys. Rev. E, Phys. Rev. Lett.* Editor of *Journal of Nonlinear Optical Physics & Materials* and *Electronic Liquid Crystal Communications*.

Selected Publications

- J. Hajtó, I. Jánossy; Optical bistability observed in amorphous semiconductors; *Phil Mag B*; <u>47</u>, 347, 1983
- I. Jánossy, AD. Lloyd, BS. Wherrett; Anomalous optical Freedericksz transition on an absorbing liquid crystal; *Mol Cryst Liq Cryst;* 179, 1, 1990
- I. Jánossy, T. Kósa; The influence of anthraquinone dyes on optical reorientation of liquid crystals; *Optics Letters*; <u>17</u>, 1183, 1992
- I. Jánossy; Molecular interpretation of the absorption induced reorientation of nematic liquid crystals; *Phys Rev E*; <u>49</u>, 2957, 1994

- I. Jánossy, L. Szabados; Optical reorientation of nematic liquid crystals in the presence of photoisomerization; *Phys Rev E*; 58, 4598, 1998
- I. Jánossy, SK. Prasad; Optical generation of inversion walls in nematic liquid crystals; *Phys Rev E*; 63, 041705/1-7, 2001
- M. Becchi, I. Jánossy, S. Rao, D. Statman; Anomalous intensity dependence of optical reorientation in azo dye-doped nematic liquid crystals; *Phys Rev E*; <u>69</u>, 051707/1-6, 2004
- I. Jánossy, T. Kósa; Gliding of liquid crystals on soft polymer surfaces; *Phys Rev E*; <u>70</u>, 052701/4, 2004
- I. Jánossy; High-precision measurement of azimuthal rotation of liquid crystals on solid substrates; *J Appl Phys*; 98, 043523, 2005
- I. Jánossy; Electromagnetic torque and force in axially symmetric liquid-crystal droplets; *Optics Letters*; 33, 2371, 2008

List of students:

- N. Éber Eötvös University, Budapest, Hungary
- A. Lloyd Heriott Watt University, Scotland
- T. Kósa Eötvös University, Budapest, Hungary
- L. Szabados Eötvös University, Budapest, Hungary
- E. Benkler Technical University, Darmstadt, Germany

Sponsored Postgraduate Scholar:

D. Statman – Allegheny College, Meadville, Pennsylvania, US

Collaborations

- 1. Liquid Crystal Institute, Kent, Ohio, U.S.: Drs. P. Palffy-Muhoray and A. Jákli
- 2. Allegheny College, Meadville, Pennsylvania: Dr. D. Statman
- 3. University "Federico II", Naples, Italy: Drs. E. Santamato, L. Marrucci and D. Paparo
- 4. Centre for Liquid Crystal Research, Bangalore, India: Drs. G.G. Nair, K. Prasad, D.K. Shankar Rao and K. S. Sandhya