

Prof. Claudio Zannoni Curriculum

- **Academic Career, Main Appointments, Awards and Honours**

- 1972 Laurea in Chimica Industriale, University of Bologna, Italy (110/110 with laude and M. Betti Prize for the best Chemistry degree). Supervisor: Prof. G.F. Pedulli.
- 1975 Ph.D. in Chemical Physics, University of Southampton (U.K.). Thesis: On the molecular theories of liquid crystals. Supervisor: Prof. G.R. Luckhurst
- 1975-1982 Assistant Professor, Faculty of Industrial Chemistry, University of Bologna
- 1979-80, 1980-81, 1981-82, Visiting Lecturer, Department of Chemistry, University of Southampton, UK.
- 1982-1987 Associate Professor of Physical Chemistry, University of Bologna
- 1987- 2018 Full Professor of Physical Chemistry, University of Bologna
- 1998- Founder and Director of the [*International School of Liquid Crystals*](#), at the Ettore Majorana Centre, Erice.
- Nov.-Dec. 1998, Feb.-Apr. 2003, Nov.-Dec. 2010, Invited Professor: IUSS, University of Pavia
- Apr.2004, Awarded Ben Sturgeon Lecture, British Liquid Crystal Society
- Nov. 2004-Oct. 2010 - Director, Dipartimento di Chimica Fisica ed Inorganica, University of Bologna
- Nov. 2010-Oct. 2012 - Deputy Director, Dipartimento di Chimica Fisica ed Inorganica, University of Bologna
- 2009-2011 Awarded Adjunct Professorship, Centre for Modelling, Simulation and Design (CMSD), University of Hyderabad, India.
- Sept. 2010. Awarded G.B. Bonino medal of the Physical Chemistry Division of the Italian Chemical Society.
- Jan. 2012- Sep. 2015 - Chairman of the Master Programme in Industrial Chemistry (Coordinatore del Corso di Laurea Magistrale in Chimica Industriale), University of Bologna
- Jul.2012- Jul.2014, Awarded Chair Professorship, Centre for Modelling, Simulation and Design (CMSD), University of Hyderabad, India.
- Aug. 2012- Jul. 2016 – President [*of the International Liquid Crystal Society \(ILCS\)*](#), Kent (OH, USA)
- Dec. 2012 – Dec. 2016, Chairman [*of EU PRACE High-Performance Computing*](#) Access Panel
- Mar. 2013-Apr. 2013 - Invited Visiting Fellow, Isaac Newton Institute (INI), University of Cambridge, UK.
- Jan. 2014, Academic Visitor, Mathematical Institute, University of Oxford, UK.
- Aug. 2015, Academic Icon Visiting Professor, University of Malaya, Kuala Lumpur, Malaysia
- Feb. 2018, Solvay Colloquium Lecturer, ULB, Brussels.
- Jul. 2018, Corresponding member of Accademia delle Scienze di Bologna.
- Jan 2019-Jun 2019, Invited Visiting Fellow, Isaac Newton Institute (INI), University of Cambridge, UK.
- Jan 2019-Jun 2019, Invited Visiting Fellow, Isaac Newton Institute for Mathematical Sciences (INI), University of Cambridge, UK
- May 2020 - Awarded Emeritus Professorship, University of Bologna
- April 2022, Awarded the G.W. Gray medal of the British Liquid Crystal Society at the Bristol UWE meeting

- **Main Research Interests and Expertise:** Theoretical Modelling and Computer Simulations (Monte Carlo, Molecular Dynamics) of Liquid Crystals, Polymers, Membranes, Proteins and other Soft Materials in the bulk or nanoconfined. Development of theoretical and computational methods for the spectroscopic (Fluorescence Depolarization, ESR spin probe, NMR) investigation of order and dynamics in anisotropic systems. Predictive atomistic simulations and applications of computer simulations to novel Liquid Crystal and Organic Electronics devices using High-Performance Computing.

- **Publications:** Over 300 papers, with a Hirsch index $H=60$ and over 12,500 citations (Google Scholar and Top Italian Scientist, VIA), $H=51$ (ISI-WoS), a graduate-level book [C. Zannoni, *Liquid Crystals and Their Computer Simulations*, Cambridge University Press, 680 pages, ISBN: 9781108424059 (2022)] and 3 co-edited books. A full list of publications is available at <https://claudiozannoni.it/art.htm>
- **Supervising Activity:** Over 46 “Tesi di Laurea”, 20 PhD thesis supervised. Has supervised over 25 international predoctoral and 30 postdoctoral fellows (from BE, BR, CA, DE, FI, FR, GR, IN, IR, IT, JP, LT, NL, SE, SI, TR, UK).
- **Presentations:** C.Z. has given more than 350 invited, keynote or plenary talks at International Conferences, Universities and Research Institutions in several countries: Yerevan (**Armenia**); Graz (**Austria**); Brussels, Leuven, Mons (**Belgium**); Aguas de Lindoia, Foz do Iguaçu, Maceió (**Brazil**), NRC, Ottawa, UBC, Vancouver (**Canada**); Xiamen, Shanghai (Fudan U.), Beijing (Beihang U, Chinese Acad. Sci., Peking U) (**China**); Tampere (**Finland**), Bandol, Bordeaux, Cergy-Pontoise, Lyon, Orsay, Paris, Sete, Strasburg (**France**); Berlin, Bremen, Juelich, Kaiserslautern, Mainz, Stuttgart (**Germany**); Corfu, Rhodes (**Greece**); Budapest (**Hungary**); Hyderabad (India); Dublin (Ireland); Bologna, Cagliari, Calabria, Camerino, Cetraro, Erice, Ferrara, Firenze, Genova, Milano, Modena, Napoli, Novara, Padova, Palermo, Parma, Pavia, Perugia, Pisa, Portonovo (AN), Ravenna, Rimini, Roma, Rovereto, Salerno, Torino, Trento, Trieste, Tropea, Urbino, Venezia (**Italy**); Kyoto, Nagoya, Nara, Osaka, Sendai, Tokyo, Tsu (**Japan**); Jeju, Seoul (**Korea**); Luxembourg (**Luxembourg**), Kuala Lumpur (**Malaysia**), Trondheim (**Norway**); Krakow, Torun (**Poland**); Lisbon (**Portugal**); Moscow (**Russia**), Ljubljana, Maribor, Portoroz, Rogaska-Slatina (**Slovenia**); Elche, Peñíscola, Zaragoza (**Spain**); Stockholm (**Sweden**); Lausanne-EPFL, Lugano, Zurich-ETH (**Switzerland**); Hsinchu, Tamsui-Taipei, Taichung (**Taiwan**); Eindhoven, Enschede, Groningen, Leiden, Utrecht (The Netherlands); Belfast, Bristol, Cambridge, Durham, Edinburgh, London, Loughborough, Manchester, Norwich, Oxford, Sheffield, Southampton, York, Warwick (**UK**); Atlanta (GA), Biddeford (ME), Boston - ACS (MA), Breckenridge (CO), Courant Institute - New York (NY), Kent State (OH), Mount Holyoke (MA), IMA, Minneapolis (MN), Penn State (PA), Princeton (NJ), San Diego (CA), Colby-Sawyer, Tilton (NH); Washington - NIST (**USA**). A full list with titles is available at <https://claudiozannoni.it/semin90.htm>.
- **Editorial Boards**
 - Advisory Editorial Board of *Chemical Society Reviews*, RSC, UK (2011-)
 - Editorial Advisory Board of *Molecular Crystals Liquid Crystals*, USA (1996-).
 - Editorial Board of *Liquid Crystal Today*, UK (2001-)
 - Editorial Advisory Board of *ChemPhysChem*, Wiley, DE (2000-2014)
 - Editorial Board of *Chemical Society Reviews*, RSC, UK (2005-2010)
 - Section Editors Board of *Chemistry Central Journal*, Biomed Central, UK (2007-2010)
 - International Advisory Board of *Physical Chemistry Chemical Physics*, UK (1999-2002)
 - Editorial Board of *Journal of Fluorescence*, USA (1992- 2001)
 - International Advisory Board of *J. Chem. Soc. Faraday Transactions*, UK (1993-1998)
 - Editorial Board of *Molecular Physics*, UK (1984-1992 and 1998-2000)
 - Editorial Board of *Liquid Crystals*, UK (1986-1990)
- **Other Activities and Services**
 - Founder and Director of the *International School of Liquid Crystals*, at the *Centro Ettore Majorana*, Erice (1998-). A list of past courses is at <http://claudiozannoni.fci.unibo.it/Erice.htm>

- President of the International Liquid Crystal Society ([ILCS](#)), Kent, OH, US,(2012-2016). On the Board of ILCS as regional representative for Italy (July 2000-2014).
- Chairman of [EU PRACE](#) Supercomputing Access Panel (Dec.2012-Dec.2016)
- Chairman of the Scientific Users Selection Panel (SUSP) panel for the High Performance Computing Centres Access programme: [HPC-Europa](#) (2004-2012) .
- Chairman of CINECA Supercomputer Center Scientific Committee (July 2012-Dec.2016).
- Member of the European Science Foundation (ESF) Pool of Reviewers (2006-), of the EPSRC Peer Review College, UK (2006-) and reviewer for several Institutions, including EU, Belgian BELSPO, Royal Swedish Academy of Sciences, A3ES.
- Member of the Chemistry Panel of Experts of the European Community, Human Capital and Mobility project (1992-1994). Member of the Fellowships and of the Networks Chemistry Review Panels for the Training and Mobility of Researchers Program (1995, 2001).
- Member of the MCT International Chemistry Panel of Evaluation (Avaliação das Unidades de Investigação), Portugal (1996)
- Member of the Scientific Board of the "Istituto dei composti del carbonio contenenti eteroatomi e loro applicazioni" (ICOCEA) CNR, Bologna (1997-2000) and of the "Centro Studi CNR sugli Stati Molecolari Radicalici ed Eccitati" (CSSMRE), Padova (1997-2000).
- Member of National Institute for the Physics of Matter (INFM) Evaluation Panel (2000).
- Member of the INFM Directors Board (2001-2003).
- Member of the International Advisory Board of the Southampton Liquid Crystal Institute (1996-2003).
- Member of the Physical Chemistry Division Board of SCI, the Italian Chemical Society (2004-2006)
- Director of the Theory Section of INSTM, the Italian Consortium for Science and Technology of Materials (Florence) (formerly INCM 1993-1996) and member of its Scientific Council (1996-March 2009).
- Coordinator of the National "Virtual" Computational Laboratory of INSTM at CINECA computing centre providing supercomputer and general computing resources and access to selected scientific software to INSTM members (1997-2009).
- Member of the Scientific Advisory Panel of the Science Festival (Festival della Scienza), Genova (2006-2012)
- Member of CINECA Scientific Advisory Board for the allocation of Supercomputer Resources. ISCRA (2010-2012, 2018-2024)
- Member of EU PRACE High Performance Computing Scientific Steering Committee (Dec. 2012-Dec.2018)
- Member of the External Assessment Team of the Agency for Evaluation and Accreditation of Higher Education (A3ES, Portugal) for the evaluation of Master and PhD courses in Chemistry (2022).