

# Curriculum Vitae

## John R. Dutcher

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Professor, Department of Physics  
Canada Research Chair in Soft Matter and Biological Physics  
Director, Nanoscience Program  
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jdutcher@mirexus.com

### Degrees

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B.Sc. (Engineering-Physics, cooperative education), Dalhousie University, 1983

M.Sc. (Physics), University of British Columbia, 1985

Ph.D. (Physics), Simon Fraser University, 1989

### Honours and Awards

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Innovation of the Year Award, University of Guelph, 2017

Tier 1 (Senior) Canada Research Chair in Soft Matter and Biological Physics, University of Guelph, 2013-2020

Tier I (Senior) Canada Research Chair in Soft Matter Physics, University of Guelph, 2006-2013

Fellow of the American Physical Society, 2007

Presidential Distinguished Professor Award, University of Guelph, 2000

Premier's Research Excellence Award, Province of Ontario, 1999

NSERC Postdoctoral Fellowship, Optical Sciences Center, University of Arizona, Nov 1988 - Aug 1990

NSERC Postgraduate Scholarships, University of British Columbia and Simon Fraser University, 1983 - 1988

Governor General's Gold Medal, Dalhousie University, 1983

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## Major Research Interests

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Physics of soft materials; bionanomaterials; biopolymers; polymer physics; viscoelasticity; bacterial biophysics; proteins and peptides; thin film instabilities; self-assembly and pattern formation

Surface-sensitive probes of large molecules at surfaces such as atomic force microscopy, fluorescence microscopy, light scattering, ellipsometry, surface plasmon resonance, infrared spectroscopy, microbalance & differential pressure techniques

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## Employment

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Professor, Department of Physics, Univ. of Guelph, July 1999 to present

Associate Professor, Department of Physics, Univ. of Guelph, July 1995 - June 1999

Assistant Professor, Department of Physics, Univ. of Guelph, Sept 1990 - June 1995

NSERC Postdoctoral Fellow, Optical Sciences Center, Univ. of Arizona, Nov 1988 - Aug 1990

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## Highlights of Professional Activities

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### International

Editor, Journal of Polymer Science Part B: Polymer Physics, 2008 - 2010

Special Advisory Editor, Journal of Polymer Science Part B: Polymer Physics, 2010 - present

Member, Editorial Advisory Board: Journal of Polymer Science Part B: Polymer Physics, 2002 - 2008; Soft Matter Journal, 2008 - 2017; Colloids and Surfaces B, 2010 - present; Scientific Reports, 2014 - present

Guest Editor: Special Issue on Nanoscale Approaches to Biological Physics, Physics in Canada, 2017; Special Issue on Dynamics of Confined Polymers, Journal of Polymer Science Part B: Polymer Physics, October 2006

### Canada

Theme Leader, Science & Engineering of Soft Materials Theme, Advanced Foods & Materials Network, national Network of Centres of Excellence, 2003 - 2009

Member, Research Management Committee, Advanced Foods & Materials Network, national Network of Centres of Excellence, 2003 - 2010

Member and Chair (2007-08), Condensed Matter Physics Grant Selection Committee, NSERC, 2005 - 2008

Chair of CAP-NSERC Liaison Committee, Canadian Association of Physicists, 2009 - 2014

Director of Academic Affairs, Canadian Association of Physicists, 2009 - 2012

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### University

Director, Centre for Food and Soft Materials Science, University of Guelph, 1999 - 2010

Director, Nanoscience Program, University of Guelph, 2010 - present

### Industry

Founder, Mirexus Biotechnologies; Director and Chief Science Officer, 2015-2016; Chairman of the Board, 2013-2015; Interim CEO, 2010-2013 (Mirexus is commercializing polysaccharide nanoparticles discovered in my laboratory)

Member, Scientific Advisory Board, Mesomat

Consulting: DuPont Performance Coatings, Nexia Biotechnologies, Dow Chemical Company

### **Professional Societies**

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Member of American Physical Society, Canadian Association of Physicists, Materials Research Society, Biophysical Society, Canadian Society for Chemistry

### **Citation Index Highlights**

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According to Google Scholar, as of July 2018,

- my publications have received a total of 6434 citations.

- my H-index is 38.

### **Conference Organization**

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I have served as organizer/co-organizer of many international meetings/symposia, and I have served as session chair at many international scientific meetings.

### **Publications and Invited Talks**

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Refereed Publications: 118

Books: 1

Patents: 4

Invited Conference Presentations: 98

Invited Seminars at Research Institutions: 108

A detailed CV is available upon request.

July, 2018