



Gary D. Jaycox

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484.319.9921 (cell)

EDUCATION

N.I.H. Postdoctoral Fellow | Columbia University

Jul 1988 – Aug 1990

Luminescent probes for nucleic acid, protein and supra-molecular structures.

Advisor: Professor N.J. Turro

Ph.D. Synthetic Organic Chemistry | Dartmouth College

Sep 1983 – Jun 1988

Dissertation: *Conformationally Restricted Bis-9-Aminoacridines: A Chemical and Biological Study.*

Advisor: Professor G.W. Gribble

M.S. Polymer Science and Engineering | UMass – Amherst

Sep 1981 – Aug 1983

Thesis: *Optically Active Polytrichloroacetaldehyde Based on Macromolecular Asymmetry.*

Advisor: Professor O. Vogl

B.S. Polymer Chemistry | Syracuse University and SUNY

Sep 1976 – May 1980

Magna cum laude

PROFESSIONAL EXPERIENCE

Visiting Scholar | Dartmouth, Department of Chemistry

Nov 2024 – present

- Chiroptical switches
- Aminoacridine DNA-binding agents
- Departmental Lecturer: organic chemistry labs

Principal Investigator | DuPont Central Research and Development

Oct 1990 – Sep 2017

Synthetic chemistry directed toward materials science applications:

- Stimuli-responsive polymers
- Chiroptical switches
- Molecular electronics
- Soft printing technologies
- Polymers for ink-jet printing
- Low-shrink dental monomers
- Reactive oligomers for low-VOC coatings
- Biodegradable polymers for precision agriculture
- DNA and protein – based materials

Editorial Staff | *Progress in Polymer Science*

A review journal published by Elsevier Science Ltd.

-Editorial Board	<i>Jan 2002 – Apr 2007</i>
-Technical Editor	<i>Jan 1999 – Dec 2001</i>
-Associate Editor	<i>Jan 1993 – Dec 1998</i>

Research Chemist | Polymer Research Institute, SUNY

Jun 1980 – Aug 1981

Synthesis and evaluation of crown ether-containing vinyl polymers.

HONORS and AWARDS

DuPont – MIT research grant: <i>Templated Protein Self-Assembly for Advanced Materials</i> (co-recipient)	2014
<i>DuPont Pinnacle Award</i> , co-developer of commercial coatings products	2003
<i>DuPont Marketing Excellence Recognition Award</i> for coatings products	2003
NIH Postdoctoral Fellowship (GM12667-01)	1988
<i>John H. Wolfenden Prize</i> for excellence in teaching at Dartmouth	1987
<i>Society of Plastics Engineers Award for Polymer Chemistry</i> (Syracuse Chapter)	1980
New York State Regents College Scholarship	1976

PUBLICATION ACTIVITY (as a Dartmouth Visiting Scholar)

G.D. Jaycox, "The Reversible Dimerization of Chiral Ureidopyrimidinones. Chiroptical Signaling via the Formation and Disruption of Quadruple Hydrogen Bonding Arrays," **Chirality** 2025, **37**, e70046. (<https://doi.org/10.1002/chir.70046>).

G.D. Jaycox, "Azobenzene-Modified Chiral Vicinal Diamides: A New Family of Light- and Solvent-Regulated Chiroptical Switching Elements," undergoing revision for **Chirality**

G.W. Gribble and G.D. Jaycox, "DNA as a Reaction Mediator. A Comparison of 9-Anilino-acridine Thiolytic Rates in the Presence and Absence of Double-Stranded DNA Hosts," undergoing revision for **Journal of Inclusion Phenomena and Macrocyclic Chemistry**.

PUBLICATIONS and U.S. PATENTS – full list available as a separate file upon request.