

Glenn M. Larkin
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Professional Experience:

March 2022 - Present Principal Scientist, LarChem LLC, Houghton, MI

- Wood Science
- Renewable Energy & Materials
- Chemistry (Clean & Green, Analytical, Phytochemical Analysis)
- Quality Management (QA/QC, Lab Accreditation, Standards Development)
- Accreditation Assessments (ISO 17020, ISO 17025)
- Litigation Support & Expert Witness Services

Jul 1998 – Mar. 2022 Wood Protection Group, Michigan Technological University, Houghton, MI

Dec. 2010 - Mar. 2022 Senior Research Scientist 1

Dec. 2007 - Dec. 2010 Research Scientist 2

Jul. 1998 - Dec. 2007 Research Scientist I

- Expertise: Wood (Decomposition, Protection, Modification, Conversion, Composites, Adhesives).
- Microscopy (SEM, TEM, Optical), Separations (GC, HPLC), Spectroscopy (FTIR, ICP, MS, SIMS, Raman).
- Full cycle project management from conception to completion. Full budget responsibility.
Principal Investigator: 125 Projects, US \$3,074,898/Co-Principal Investigator: 367 Projects, US \$9,989,427
- Idea generation, experimental design, proposal preparation, data analysis/interpretation.
- Results communication (reports, oral presentations, publications).
- Quality system development, implementation, management (ISO 17025 Accreditation 2007-2022).

Aug. 1999 - Dec. 2000 Instructor, Michigan Technological University, Houghton, MI

- Taught: Wood Physics, Wood Manufacturing & Machining.
- Co-Taught: Wood Mechanics, , Wood Preservation & Seasoning, Wood Technology.

Jun. 1996 - Aug. 1997 Senior Chemist, Alpha Chemical & Biomedical Laboratories, Petaluma, CA

- Expertise: Phytochemical Analysis, Method Development & Transfer, R&D, Lab Management, QA/QC
- Separations (GC, CE, HPLC, TLC) and Spectroscopy (FTIR, MS, UV/Vis).
- Business Development & Educational Outreach, Short Course Development & Delivery.
- Represented lab at meetings/conferences, in trade organizations and standards organizations.

Mar. 1996 - Dec. 2003 President, PhytoScience Associates, Redondo Beach/Rohnert Park, CA and Houghton, MI

- Expertise: Phytochemical Analysis, Method Development & Transfer, Product/Technology Evaluation
- Separations (GC, CE, HPLC, SFE, TLC) and Spectroscopy (FTIR, MS, UV/Vis).
- Expert advice for botanical nutritional supplement and natural products clients.
- Monograph and white paper development (botanical supplement characterization).

Apr. 1994 - Mar. 1996 Analytical Chemistry Manager, Botanicals International, Long Beach, CA

- Expertise: Phytochemical Analysis, Method Development & Transfer, QA/QC, Technical Service.
- Separations (GC, CE, HPLC, TLC) and Spectroscopy (FTIR, UV/Vis).
- Proposed/implemented FTIR fingerprint library for identification of botanical raw materials.
- Proposed/implemented CE as analytical method for quantification of botanical marker compounds.
- Technical service to internal (production and warehousing) and external customers.
- Helped develop/implement Quality Management System (HACCP, GMP, ISO 9001) compliant.
- Represented company at meetings/conferences, in trade organizations and standards organizations.

Apr. 1993 – Apr. 1994 Co-founder and Chief Science Officer, E.E. Dahlkin Enterprises, New Westminster, BC

- Expertise: Business/Product Development, R&D, Green Chemistry & Processes, Formulation, Coatings.
- Developed and implemented system to convert hotel and restaurant waste into compost.
- Invented the “Kitchen Vermiculator” to compost kitchen wastes.
- Formulated environmentally friendly coatings.
- Developed vertically integrated alternative crop to consumer product programs for agricultural co-ops.
- Sold company (April 1994).

Apr. 1992 - Apr.1993 Assistant Scientific Manager, Napier International Technologies, Langley, BC

- Expertise: Wood Preservatives, Coatings, Formulation, Lab Management, Regulatory Affairs, QA/QC.
- Supervised R&D & analytical labs.
- Technical service & trouble shooting to manufacturing and customers. Product claim investigations.
- Developed and implemented ISO 9001 Compliant QA/QC program.
- Regulatory affairs (Canada and USA).

Feb. 1988 - Jul. 1989 Co-founder and Principal Chemist, NaTint, Charlotte, NC

- Expertise: Dyes, Natural Fibers, Extraction, Formulation, Business Development.
- Separations (TLC, Column Chromatography), Color analysis.
- Selection, cultivation, and extraction of dye plants.
- Developed product specifications and QA/QC procedures.
- Dying natural fibers, blending/formulation of proprietary tints.
- Sold company (July 1989).

Jul. 1987 - Feb.1988 Quality Control Chemist, Baxter HealthCare, Marion, NC

- Expertise: Raw Materials Analysis, Method Development, QA/QC.
- Separations (GC, HPLC), Spectroscopy (Fluorescence, UV/Vis).
- Proposed, developed, implemented a heparin analysis that realized cost savings of \$250,000/year.

Professional Preparation:

Ph.D. Forest Science, ABD - Michigan Technological University, Houghton, MI
M.S. Chemistry, 1991 - University of Idaho, Moscow, ID
B.S. in Chemistry, ACS Accredited, 1983 - University of Denver, Denver, CO

Select Professional Memberships:

- American Chemical Society (ACS)
- Forest Products Society (FPS)
- Society of Wood Science & Technology (SWST)
- American Wood Protection Association (AWPA)
- International Research Group on Wood Protection (IRG)
- International Association of Wood Anatomists (IAWA)
- Technical Association of the Pulp & Paper Industry (TAPPI)
- Railway Tie Association (RTA)
- American Oil Chemist's Society (AOCS)
- Society for Applied Spectroscopy (SAS)
- Electrochemistry Society (ECS)
- Royal Society for Chemistry (RSC)

Select Professional Activities:

American Chemical Society (ACS)

- Upper Peninsula Local Section: Chair (2018, 2024), Temporary Councilor (2017-2018), Councilor (2019-Present)
- Cellulose and Renewable Materials Division (CELL): Vice Program Chair (2018-2019, 2022-2023), Program Chair (2020-2021, 2024-2025).
- Committee on Ethics (ETHX): Associate (2020-2021), Program Chair (2022-2023), Chair (2024-Present).
- Divisional Activities Committee (DAC): Associate (2022), Consultant (2023)
- Multi Programing Planning Group (MPPG): Thematic Programing Chair (2018-2022), Chair-Elect (2022), Chair (2023)
- Great Lakes Regional Board: President-Elect (2022), President (2023-Present)
- Presidential Events Co-Program Chair (2023)

American Wood Protection Association (AWPA)

- Task groups pertinent to evaluation and analytical method standards (1999 - Present)
- Committee P-9 Vice-Chair (2022-2023), Chair (2023 – Present)
- Committees: P1, P3, P4, P5, P6, T2, T3, T4, T7, T8, T11
- 121st Annual Meeting General Vice-Chair (2025)

AOAC International:

- General Referee: Botanicals & Other Supplements (1995-1998)
- General Methods Committee (1996-1998)

Peer Reviewer:

- *Forest Products Journal*
- *Cellulose*
- *Wood and Fiber Science*
- *Journal of AOAC International*
- *American Herbal Pharmacopeia*