Wood Scientist Career Reflections: A Journeyman’s Perspective

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Overview

• Why I chose the profession of wood science and technology?
• Educational and research pursuits
• On being a mentor
• Developing a “tool kit”
• Have a professional “bucket list”
• Measures of success
• On Service
• Advice to aspiring wood scientists
Journeyman

• A journeyman is a person who has completed an apprenticeship and is fully educated in a trade or craft, but not yet a master.
• Any experienced, competent but routine worker or performer.
• I’m still a work (or “piece of work”) in progress.
Why I chose the profession of Wood Science and Technology?

• As a child, I loved the outdoors and especially playing in the woods (still do).
• I was 11 years old the first Earth Day, so the idea of becoming a “forest ranger” was an attractive occupation.
• Science and technology were also attractive
Why did I choose Wood Science and Technology?

• “There are those of you who like to play in the woods and those of you who will like to work in woods, and in this class you will find out who you are… “

• (Professor Ed “Pop” Giddings 1976)
Educational pursuits and why?

- B.S. Forestry 1980
  *Wood Science & Technology Curriculum*
- Ph.D. Wood Science & Technology 1985
- *Wanted a job in research & development (R&D)*
Influential books in my personal development

- Zen and the Art of Motorcycle Maintenance
  - “And what is good, Phaedrus, And what is not good—Need we ask anyone to tell us these things?”

- Ben Franklin’s autobiography
  - "Without freedom of thought there can be no such thing as wisdom"
Career Research Topics

**COMPOSITES**
- Wood-non wood composites
- Recycled wood composites
- Wood plastic composites
- Wood pellets
- Cellulose nanocomposites

**Wood**

**APPLIED WOOD CHEMISTRY**
- VOC emissions from hot-pressing
- Characterizing recycled paper fibers
- Hardwood preservation

**ADHESION**
- Adhesive bonding/adhesion
- Lignin-based wood adhesives
- Wood surface modification
- Wood wettability/contact angle analysis
- Hydroxy methyl resorcinol (HMR)
A Mentor Plays Many Roles

• Teacher
• Advisor
• Friend
• Psychiatrist
• Editor
• Guru
• Counselor
Thank you to my mentors!

“It takes a village to raise a wood scientist”

Family & Friends
Mississippi State University
- Terry Sellers, Jr.
- Gary McGinnis
- Bill Nearn*
- Mike Barnes*

K-12 Teachers, Coaches
University of Maine
- Dick Hale
- James Shottafer
- Craig Schuler
- Dick Jagels
- Joe Genco

Marcal Paper
- Elwood Shropshire

USDA Forest Service
- Charlie Vick, Bryan River, Al Christiansen, Rod DeGroot, Dick Hemingway

Auburn University
- Tom Elder
- John Haygreen*
- R. C. Tang

West Virginia University
- Jack Coster
- Jim Armstrong*
- Dave Patterson

My mentors are legion
Professional Interactions Over the Years

“It’s a small world after all…” Sherman and Sherman
Develop Your “Tool Kit”

• Knowledge of wood materials and manufacturing
• Oral and written communication
• Get along well with others
• Computer skills
  • (Back up your data)
• Being able to multi-task
• Life Long Learner
• Be able to market yourself without coming off as arrogant
Everyone has something unique to offer

Great interest in trendy scientific topics and the scientific “herding mentality” insures significant research output in the coming years

- Research topics will vary throughout your career so one needs to be adaptable
- “A prophet is not without honor, save in his own country” *Bible*
- Hopefully, your unique background and “world view” will help you to contribute to whatever scientific pursuit in wood science and technology you happen to pursue.
Measures of Professional Success

• Have a Professional “Bucket List”
  • Publish 100 peer reviewed journal articles
  • Mentor successful graduate students
  • Active participant in SWST Visiting Scientist Program
  • Invent something (patent)
  • Mentor a Wood Award Winner
  • Win the George Marra Award
  • Have a PhD advisee hired in a tenure-track position
Advice to Aspiring Wood Scientists

• Be engaged in the profession
• Love what you are doing
• Strive for excellence (*not perfection*)
• A career is a marathon not a sprint
• Be willing to take chances
• Work hard: Play hard
• Be able to laugh at yourself
“If anyone wants to be first, he shall be last of all and servant of all.”

Mark 9:35
“Take only memories, leave only footprints.” Chief Seattle
Upta Camp!