

**Name First Name: Dr. NOËL Marion**

Function: Scientific collaborator, Project leader

Affiliation: Bern University of Applied Sciences – Architecture, Wood and Civil Engineering

Address: Solothurnstrasse 102 - Postfach

Postal Code, City: CH-2500 Biel 6

Country: SWITZERLAND

Email: [marion.noel@bfh.ch](mailto:marion.noel@bfh.ch)

Website: <http://www.ahb.bfh.ch/ahb/en/Home/>

**Involvement in the COST Action: Member of WG1**

Research interest

Wood coating: innovative formulations, innovative curing technologies, innovative properties of coatings on other substrates, use of nanotechnology

Wood protection, chemical modification, use and development of bio-products for wood impregnation and stabilization (bio-polymers)

Specialized techniques available in my lab

- Wood coating:
  - o Coating technologies: powder coating line, spraying room, roller coating machine, curtain coating machine
  - o Curing technologies: hot air tunnel, UV-lamps
  - o Characterization: all equipments for standardized assessment of coated surfaces (abrasion, scratch, adhesion, color and gloss, hardness, brinell test, resistance to liquid chemicals, wet and dry heat, ...)
- Natural weathering sites, artificial weathering devices: QUV and Q-Sun
- Chemical characterization: UV-visible, GCMS, HPLC, FTIR-ATR, DSC, Zeta-sizer
- Microscopy: SEM, AFM, optical microscopes (reflexion, transmission, UV light), equipment for samples preparation (microtome, sputter coater, polishing machine)
- Biological test: culture of fungi for evaluation of wood resistance

Laboratory autoclave for wood impregnation